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ABSTRACT

This report provides an evaluation of the Online at PA Libraries project which was initiated in the Fall of 1996 by the Pennsylvania Department of Education's Office of Commonwealth Libraries and the Schuylkill Intermediate Unit. The report documents that the following goals were accomplished: (1) provide public access to the Internet through Pennsylvania's public libraries; (2) provide library users with timely information for educational research, economic development, and recreational purposes; and (3) ensure that trained library staff are available to help the public find the information they need in an online environment. Key assessment questions were answered by the use of a range of data collection techniques including surveys of librarians and users, site visits, focus groups, interviews, and other techniques. From the viewpoint of project participants, the project was clearly successful. The list of various benefits and impacts that have come to the library, the users, and the community overall is significant and consistent across most libraries. The study concludes with a discussion of key issues raised by the Online at PA Libraries project and lessons that have been learned from this effort that can be incorporated into future efforts. Specific recommendations include building on the project with future projects, developing new roles for Pennsylvania libraries and librarians, and developing a statewide strategic planning effort to continue to take advantage of the evolving global networked environment for the benefit of Pennsylvania residents. The user questionnaire is appended. (Author/AEF)

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ED 413 924

LINKING PEOPLE TO THE GLOBAL NETWORKED SOCIETY

EVALUATION OF THE ONLINE AT PA LIBRARIES PROJECT: PUBLIC ACCESS TO THE INTERNET THROUGH PUBLIC LIBRARIES

Final Report For:

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EXECUTIVE SUMMARY

This report provides an evaluation of the OnLine at PA Libraries project which was initiated in the Fall of 1996. The project, funded by Bell Atlantic, and administered by the Pennsylvania Department of Education's Office of Commonwealth Libraries and the Schuylkill Intermediate Unit, has had a significant and important impact on the provision of Internet-based information services and resources to the residents of Pennsylvania. The original project goals were to:

- Provide public access to the Internet through Pennsylvania's public libraries.
- Provide library users with timely information for educational, research, economic development, and recreational purposes.
- Ensure that trained library staff are available to help the public find the information they need in an online environment.

The report documents that these goals were, in fact, accomplished. Moreover, the report identifies many additional impacts and benefits that resulted from the project.

The evaluation, which began October 1996 and was completed October 1997, was guided by specific research questions such as: What are the scope, reach, and dimensions to the OnLine at PA Libraries project? How much Internet activity and of what types are taking place in participating libraries? What types of users access the Internet connection and to what types of services and activities do they connect? What are the costs for such connectivity and various types of network activities and services? How has access to and use of networked information resources and services affected participating libraries in terms of economic competitiveness, education, productivity, quality of life, and other indicators of socio-economic well-being?

These, and other key assessment questions were answered by use of a range of data collection techniques including surveys of librarians and users, site visits, focus groups, interviews, and other techniques.

From the viewpoint of project participants -- be they library directors, library staff, users, or local government officials -- the project has clearly been successful. The list of the various benefits and impacts that have come to the library, the users, and the community overall, is significant and consistent across most libraries. Some of the most important indicators of the success of the project are that it:

- Linked networked information to users and resolved a range of their information needs that otherwise would not have been resolved; there were numerous "success stories" of how public access to the Internet greatly assisted users;

- Removed some of the isolation of the community by providing a "link" between the participating libraries' communities and the ideas, resources, and information in a global setting;

- Provided access to a range of networked information resources and services that otherwise could never have been obtained by participating libraries;

- Brought new users into participating libraries that otherwise may not have used "traditional" library services or resources;

- Increased the visibility and credibility of participating libraries;

- Provided valuable publicity for participating libraries as a public access point to state-of-the-art technology and information services;

- Served as a catalyst for participating libraries and their staff to move into the electronic networked environment; and

- Provided a workstation and additional information technology that otherwise could not have been purchased or obtained by participating libraries.

Other key indicators of the success of the project include the following:

- 26% of users of the public access workstation were *new* users, i.e., they had not previously visited the library.

- The public access workstation attracts both expert -- 44% -- and beginning users -- 48%.

- 35% of users of the public access workstations had no other means to access the Internet *except* from participating OnLine at PA Libraries. Perhaps equally interesting is that the other 65% *do* have access to the Internet elsewhere (e.g., work, home, school), and still choose to use the public access workstation.

- Users of the workstations (on a scale of 1= Very much so and 5= Not at all) rated finding the information they needed on the Internet, the ease of using the Internet via the library, and the importance of having access via the library between 1.7 and 2.2. Overall, therefore, users found that gaining access to the Internet, using the workstation, and the information found on the Internet to be of value.

- In terms of major benefits from the project, 48% of participating library directors thought the expanded availability to reference sources was critical; and 32% thought the major benefit was attracting new users to the library.

The study concludes with a discussion of key issues raised by the OnLine at PA Libraries project and lessons that have been learned from this effort that can be incorporated into future efforts. Specific recommendations include building on the OnLine at PA Libraries project with future projects, developing new roles for Pennsylvania librarians and libraries, and developing a statewide strategic planning effort to continue to take advantage of the evolving global networked environment for the benefit of Pennsylvania residents.

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PREFACE

In Fall 1995, the President and CEO of Bell Atlantic spoke to Pennsylvania's First Lady about his interest in helping libraries. The First Lady is a professional librarian who directed a Pennsylvania library system before her husband was elected Governor. The First Lady and the Administration saw the need for libraries to provide access to the Internet. They suggested that Bell Atlantic work with Gary D. Wolfe, Deputy Secretary of Education and Pennsylvania's Commissioner for Libraries. The Deputy Secretary met with Bell Atlantic's President and Vice President for External Affairs to discuss a possible proposal. The Deputy Secretary said he was interested in bringing the Internet to small rural libraries. The President of Bell Atlantic was excited at the prospect. Such a project was what he had in mind.

The Deputy Secretary and his staff from the Office of Commonwealth Libraries, also known as the State Library of Pennsylvania, began work on a draft proposal. They worked with a committee that included representatives from the Schuylkill Intermediate Unit (SIU); the Executive Director of the Health Sciences Library Consortium; the Education Secretary's Special Assistant for Technology; the Deputy Secretary and selected staff from the Commonwealth's Office for Information Technology; and representatives from the Governor's Office.

The committee discussed and revised the draft proposal after a conference call with Bell Atlantic employees. The Pennsylvania Department of Education submitted the final proposal to Bell Atlantic in December 1995. After some negotiation with Bell Atlantic, the proposal was approved and granted the Commonwealth $750,000 to bring the Internet to Pennsylvanians through small, rural public libraries.

On April 17, 1996, Bell Atlantic presented the $750,000 check to the First Lady at a ceremony at the East Shore Branch Library of the Dauphin County Library System. After the grant award, the First Lady demonstrated the World Wide Web to elementary students from a neighboring school.

The Office of Commonwealth Libraries contracted with the SIU to implement the grant and provide technical consultation and assistance, to handle equipment orders, and to coordinate training with State Library staff. The Director of Library Development handled implementation of the project at the State Library. The SIU hired an individual to provide technical coordination of the project while the SIU manager continued to provide professional technical consultation. Most planning and implementation of project objectives involved these three people.

Public libraries had to apply to participate in the project. Appendix A is a copy of the application form used by libraries to participate in the project. Applications were due by June 15, 1996, and applicants had to agree to:

- Place the equipment (comprised of a computer workstation with software and a printer) in an accessible public service area, on furniture supplied by the participating library, and make the workstation available for the public to use when the library was open.

- Install one phone line to the workstation.

- Participate in the project at least two years after the grant year and pay certain start-up and continuing costs (the grant application had an estimation of these costs. Local costs included phone line installation, telephone bill for local line, Internet provider fee, software/hardware maintenance and training/technical support after the grant year).

- Have at least one public service staff member attend all required training sessions.

- Agree to participate in public awareness activities.

One hundred eighty-eight libraries applied and all were accepted into the project. Participating libraries were notified in July 1996.*

The SIU ordered the equipment in August, the vendor configured it in August and September 1996, and it was shipped to participating libraries in October and early November. Basic training was held in October 1996. Libraries began offering the service as early as November 1996 with the last libraries coming online in February 1997. A committee of reference librarians, district library center (DLC) consultant librarians, SIU staff, and Office of Commonwealth Libraries staff met in February and March to plan the advanced training, which was held in April and May 1997.

The SIU contracted, in October 1996, with Charles R. McClure and John Carlo Bertot to conduct an evaluation of the project. They completed the evaluation in October 1997, resulting in this report.

* Due to lower than expected telecommunications costs (almost all libraries found Internet Service Providers within their local calling areas), the State Library was able to add 55 more local libraries to the project in August 1997. Most of those new libraries began providing service to the public by September 1997. Data reported in this study do not inlcude these 55 libraries.

ACKNOWLEDGEMENTS

This study could not have been completed without the assistance of numerous individuals and organizations. The active involvement of these many individuals contributed to the success of both the OnLine at PA Libraries project as well as the success of the evaluation effort.

The authors would first like to acknowledge the assistance of Barbara Cole, Director of Library Development at the Office of Commonwealth Libraries. Ms. Cole provided ongoing assistance to the study as Project Liaison by providing information, suggestions, and ideas for refining data collection instruments. She was especially helpful in encouraging librarians to respond to the various surveys and arranging for site visits. Her support for the project and her direct involvement in a range of project activities was an important contribution to this effort.

Equally important were the contributions from James S. Fogarty, Director and Michelle Misiewicz, OnLine at PA Libraries Coordinator at the Schuylkill Intermediate Unit (SIU). As with Ms. Cole, these individuals provided a wealth of information related to participating OnLine PA Libraries, reviewed data collection instruments, and offered advice on a host of topics related to project activities. We are especially appreciative for Ms. Misiewicz's management of the data entry and keyboarding of the responses to the various surveys administered during the evaluation effort.

Another group of participants who deserve acknowledgement are the librarians at the four sites visited by the authors. These individuals did an outstanding job of organizing the logistics for the site visits, providing the authors with a range of background information, encouraging local librarians and users to attend focus groups, and going "beyond the call of duty" to make the site visits a success. We appreciate not only their efforts for organizing the site visits but their hospitality and friendliness as well.

Finally, we wish to thank the many librarians and staff participating in the OnLine at PA Libraries project who completed the various surveys. We especially want to thank them for their efforts in distributing the user survey and helping to produce the responses from almost 2,000 users of the public access workstation during May 1997. Their assistance was instrumental in obtaining the high quality data that forms the nucleus of Chapter 2.

Charles R. McClure
John Carlo Bertot
October 15, 1997

CHAPTER 1

EVALUATION OF THE ONLINE AT PA LIBRARIES PROJECT: PUBLIC ACCESS TO THE INTERNET THROUGH PUBLIC LIBRARIES

The OnLine at PA Libraries project (henceforth referred to as the project) has provided an important impetus to rural libraries in the state of Pennsylvania to become part of the evolving global networked information society. The project began at a fortuitous time when there was both funding available from Bell Atlantic and significant interest from the public library community in connecting to the Internet and providing new services to their communities. The project was also timely as it demonstrated what *could be* done, statewide, with some new resources, initiative, interest, and committed and dedicated librarians.

The original project goals were to:

- Provide public access to the Internet through Pennsylvania's public libraries.
- Provide library users with timely information for educational, research, economic development, and recreational purposes.
- Ensure that trained library staff are available to help the public find the information they need in an online environment.

Specific project objectives to be accomplished during the 18 month effort that began April 1996 included:

- Establish additional points of Internet connectivity to serve those regions of the state currently lacking local access.
- Utilize optimal communications pathways to ensure equitable and inexpensive online access throughout the state.
- Equip 300 public libraries to offer a graphical, user friendly interface to the Internet.
- Provide basic and advanced training attended by at least 500 library staff members who increase their skills to better help the public navigate in the online environment.

By September 1997, at the end of the project:

- At least 500,000 Pennsylvanians per week will access online information sources through the Internet at their public libraries.

- Based on survey results, 80% of public access users will report the information they find helps them make wise decisions in their personal, work, and public lives.

These were ambitious goals and objectives. The State Library, Bell Atlantic, the Schuylkill IU, participating public libraries and librarians, and others associated with the project committed significant effort, time, and resources to making it successful.

The project operated in a context where Pennsylvania currently ranks 36th of the 50 states in per capita support for public libraries; continues to fall behind other states in its support and development of new services for public libraries; and as a result, has low circulation per capita and smaller staffs than other states (*Philadelphia Inquirer*, June 1-4, 1997). Yet despite these and similar statistics of limited support for public libraries in Pennsylvania, the OnLine at PA Libraries project has been successful.

The project has provided a statewide demonstration of what *can* be done to quickly and significantly improve public library services statewide; to connect public libraries to the Internet and provide a range of new services and resources to their communities; and to "jumpstart" libraries, librarians, and citizens into the global networked society. This report describes these (and other successes) and identifies related key issues for government officials, the library community, and local communities to discuss as public libraries continue to move into the global networked society.

INTRODUCTION

The idea of a "networked environment" encompasses a range of electronic networked activities and services. Minimally, the networked environment includes information and media services, products, hardware and software, and resources that are received by users via electronic networks. In this environment, many information services are provided by local, regional, national, and international networks. Locally developed information services (i.e., from a library, computing services, private sector firms, individuals, or others) may comprise the majority of the networked environment.

There is no easy or straightforward method to operationalize a definition for a network. It may be helpful to think of a network as comprising these components:

- Technical Infrastructure: the hardware, software, equipment, communication lines, and technical aspects of the network;

- Information Content: the information resources available on the network;

- Information Services: the activities in which users can engage and the services that users may use to complete various tasks;

- Support: the assistance and support services provided to help users better use the network; and

- Management: the human resources, governance, planning, and fiscal aspects of the network.

These five basic components suggest the multi-dimensional nature of electronic networks in public libraries and the extent to which the networks can be described, defined, and then evaluated.

Many organizations in general, and public libraries in particular, have built significant networks and connected to the Internet as part of the evolving National Information Infrastructure (NII). As of Spring 1997, 72.3% of public libraries are connected to the Internet, as compared to 20.9% in 1994 (Bertot and McClure, 1997). The overall public library level of Internet connectivity varies greatly, however, by the population public libraries serve, with 1997 data suggesting that public libraries in larger population areas having significantly higher (100% for libraries with population of legal service areas of greater than one million) rates of Internet connectivity than public libraries in smaller population areas (56.3% for libraries with population of legal service areas of less than 5,000). There is also a significant difference in public library connectivity between urban (86.9% for central city libraries) and rural (66.0% for non central city libraries) libraries. Such differences also are true for Pennsylvania. Thus, public library Internet connectivity has not been equal nor even throughout the Nation nor Pennsylvania. As a result of the Project, however, access has become significantly more equal and even across the state.

There is a great deal of electronic networking activity occurring in the public library, statewide, and K-12 environments. These innovative and creative initiatives demonstrate what can happen when the private sector, federal, state, and local governments, community-based stakeholder groups, and private sector organizations collaborate to create new means of working together, doing more with less, and reducing the overlap of services. In doing so, network creators assume that such initiatives will provide better government services and promote greater citizen prosperity, productivity, and education at all levels through the effective and efficient use of advanced networking technologies (Office of the Vice President, 1993; National Information Infrastructure Advisory Committee, 1995).

PUBLIC LIBRARY TELECOMMUNICATIONS AND NETWORK POLICY CONTEXT

The current policy environment in which public library and statewide networking activities occur is one of rapid change. The telecommunications legislative and regulatory frameworks, as well as federal library-related legislation, continue to evolve and create new opportunities for public library-based networking initiatives. Perhaps more challenging than this fluid policy context is the speed with which new technologies continue to emerge and provide new challenges and needs for technology planning and implementation at both local library and statewide levels.

The Library Services and Technology Act

On September 30, 1996, the President signed into law the Library Services and Technology Act (P.L. 104-208) (LSTA). LSTA marked a change in the direction of federally-funded library initiatives over its predecessor the Library Services and Construction Act (LSCA) in several key ways:

- LSTA consolidates portions of the Higher Education Act (HEA) that related to a variety of library-related aspects. In doing so, LSTA creates the Institute for Museum and Library Services (IMLS) as the federal agency responsible for the administration of LSTA;
- LSTA applies to nearly all types of libraries, not just public libraries;
- LSTA expands the scope of library activities beyond those traditional services of books and buildings to electronic networking activities; and
- LSTA requires states to evaluate and report on the impact of LSTA-funded initiatives.

Taken together, these key components of LSTA create a new federal-state-library funding environment that emphasizes collaboration, performance, and technological innovation.

The Government Performance and Review Act

Espousing the virtues and needs of effective and efficient government requires that citizens and federal government managers alike benchmark government services against some performance measure(s) and/or indicator(s). In a step towards developing such performance measures, the Congress passed the Government Performance and Results Act (P.L. 103-62) (GPRA). The GPRA stresses the need to

improve federal program effectiveness and public accountability by promoting a new focus on results, service, and customer satisfaction.

Specifically, the GPRA requires federal agencies to establish program-based performance goals for agency program areas that are quantifiable, objective, and measurable. Agencies must also create performance indicators that can measure and/or assess the outputs, service levels, and outcomes of agency program activities.

The GPRA, therefore, requires each federal agency to have a clear mission that describes the purpose and function of the agency, develop set of outcome-oriented objectives that serve to attain the agency mission, and develop a set of quantifiable performance indicators and measures that will assist program managers determine whether and the extent to which their programs achieve program objectives and support the agency mission.

GPRA has a substantial impact on the IMLS and, subsequently, LSTA. LSTA was created as a performance- and results-based initiative. There is likely to be continued emphasis on states receiving federal money to be able to demonstrate and measure specific outcomes from federally funded projects. Given this environment, the evaluation of the OnLine at PA Libraries project provides a range of methods and data collection techniques that can be used on similar projects by the State Library.

The Telecommunications Act of 1996

The Telecommunications Act of 1996 (P.L. 104-104) (TCA) was the first significant legislative overhaul to the Communications Act of 1934. The TCA essentially updated a variety of key aspects of the telecommunications industry, creating a more market-driven industry that relied on competition to foster lower telecommunications rates throughout the nation (Mueller, 1997).

The universal service provision of the TCA specifically directed the Federal Communications Commission (FCC) to create a discount structure for telecommunications services for schools, libraries, and rural health care institutions (P.L. 104-104, Section 254). Based on the broad guidelines established by the TCA, the FCC issued its final universal service rulemaking on May 7, 1997. In this ruling, the FCC created a (Federal Communications Commission, 1997, Section X):

- $2.25 billion annual discount fund for schools and libraries; and
- Telecommunications discount structure ranging from 20%-90% for telecommunications services (defined as telecommunications conduits -- e.g., leased-lines --, internal wiring, and Internet connectivity). The discount rate a school or library can receive depends on the percentage of students on school lunch programs and the location (urban/rural) of the school or library.

The universal service provisions of the TCA, and the FCC implementation of those provisions, are aimed specifically at increasing the level of connectivity of schools and libraries to the Internet.

Putting the LSTA, TCA, and GPRA Together

Collectively, LSTA, TCA, and GPRA create a policy and regulatory environment that emphasizes market forces, performance measurement, and connectivity with the intent of creating an economically competitive nation in an information society (Bertot and McClure, 1996a).

More specifically, LSTA, TCA, and GPRA combine to:

- Promote local and statewide electronic networking activities to ultimately create a nationwide network of networks to which all Americans have access;
- Expand the concept of telephone-based universal service to the electronic networked environment by providing schools and libraries with discounted telecommunication services; and
- Evaluate the economic and social impacts of networking initiatives and funding for such initiatives on local, state, and national communities.

This new environment is one, therefore, in which schools, libraries, and state library agencies need to collaborate more than ever to create an electronic networked infrastructure and subsequently provide a variety of network-based services over that infrastructure.

The Pennsylvania Context

In June 1997, the Pennsylvania Public Utility Commission (PUC) adopted the FCC discount matrix, making Pennsylvania eligible for intra-state as well as interstate telecommunications discounts for schools and libraries under the Telecommunications Act of 1996. The Pennsylvania program will not go beyond the eligibilities and discounts in the federal program at this time. The Office of Commonwealth Libraries has responsibility for reviewing and approving library plans.

To date, the Office of Commonwealth Libraries has provided advice to libraries in the form of memos and workshops. The memos were sent to all libraries that were thought to be eligible and the workshops have been for the DLC administrators and consultants so that they could bring back the information to their local libraries. The Office of Commonwealth Libraries also provided information so that each library could calculate its discount. All public libraries in PA have the potential of receiving discount rates between 40% and 80%.

The telecommunications environment and use of the Internet in Pennsylvania libraries is a rapidly changing situation. Those libraries that participated in the OnLine at PA Libraries project (as well as others) are likely to provide significant increased demands for Internet-based services and connections. There are, however, significant issues yet to be addressed in terms of equality of access, costs, availability of equipment, and resource sharing.

THE EVALUATION APPROACH

The OnLine at PA Libraries project provides an excellent opportunity not only to study the impacts of providing Internet connectivity to local communities, it also can assist the development of valid and reliable network performance measures and evaluation techniques. In addition, answering a number of key questions can assist Pennsylvania officials to better plan for future Internet development. These questions include:

- What are the scope, reach, and dimensions to the OnLine at PA Libraries project?
- How much Internet activity and of what types are taking place in participating libraries?
- What types of users access the Internet Connection and to what types of services and activities do they connect?
- What are the costs for such connectivity and various types of network activities and services?
- How has access to and use of networked information resources and services affected participating libraries in terms of economic competitiveness, education, productivity, quality of life, and other indicators of socio-economic well-being?
- What types of performance measures are appropriate to determine the impact of this initiative on participating libraries, local communities, and individuals;

and what types of performance measurement tools can assist policy makers and researchers measure those identified performance measures?

There is a growing interest in identifying and measuring the impacts of public library Internet connectivity. Answers to questions such as "does the network improve the productivity of users?" or "is networking worth the cost?" are impossible to answer without first defining and then calculating some basic measurement techniques. The OnLine at PA Libraries project provides an opportunity to extend our knowledge about how to answer these and related questions.

Approaches for evaluating networked information services can be based on the following criteria:

- Extensiveness: how much of the service has been provided, e.g., number of users logging-in per week on a bulletin board or the number of participants of a particular listserv.

- Efficiency: the use of resources in providing or accessing networked information services, e.g., cost per session in providing access to remote users of an on-line catalog, or average time required to successfully telnet to a remote database.

- Effectiveness: how well the networked information service met the objectives of the provider or the user, e.g., success rate of identifying and accessing the information needed by the user.

- Service quality: how well a service or activity is done, e.g., percentage of transactions in which users acquire the information they need.

- Impact: how a service made a difference in some other activity or situation, e.g., the degree to which network users enhanced their ability to gain employment or pursue business.

- Usefulness: the degree to which the services are useful or appropriate for individual users, e.g., percentage of services of interest to different types of user audiences.

- Adoption: the extent to which institutions or users integrate and adopt electronic networked resources or services into organizational or individual activities, e.g., classroom instruction.

Evaluations of public library provision of networked information services, while needing to consider extensiveness and efficiency criteria, should give more attention to effectiveness, service quality, usefulness, impact, and adoption measures.

Developing measures to assess *impacts* from the provision of networked services from public libraries has proven to be a challenging endeavor because of the lack of basic measures that describe and assess the networked environment. Methods for simply counting types of users and their network activities require the resolution of a range of issues and policies. Nonetheless, this study provides a beginning perspective on the development of such measures and evaluation techniques.

The evaluation of the OnLine at PA Libraries project continues work by McClure and Bertot which includes the national survey and assessment of *Public Libraries and the Internet* in 1994 (McClure, Bertot, and Zweizig), in 1996 (Bertot, McClure, and Zweizig), and in 1997 (Bertot and McClure); *Internet Cost and Cost Models for Public Libraries* (McClure, Bertot, and Beachboard, 1995); and the evaluation of the statewide network in Maryland, *Sailor Network Assessment Final Report* (Bertot and McClure, 1996b).

EVALUATION METHODOLOGY

This evaluation project serves as an initial assessment of the Project that will provide the Office of Commonwealth Libraries with baseline data on the value, use, and impact of the project on various user communities throughout the state.

Evaluation Goals and Objectives

In particular, the evaluation project will assist the Office of Commonwealth Libraries, public librarians, and others by achieving the following goals:

- Determining the degree to which original project goals and objectives have been accomplished.
- Evaluating the value of the project to such communities as the K-12, public library, business, minority, senior, and state and local government
- Recommending refinements and modifications to the project to more closely meet the needs of the target communities
- Measuring the nature and extent of K-12, public library, business, minority, senior, and state and local government community use of the Project, with emphasis on the incorporation of Project-based resources into community activities
- Creating measurement devices that the Office of Commonwealth Libraries can use in the future to maintain ongoing or periodic assessment of the project.

To achieve these goals, the consultants performed the following tasks:

(1) Assessed the impact of the project on participating public libraries in terms of

- Provision of basic reference services
- Provision of document delivery services
- Assistance to users for

  -Instruction
  -Technical assistance

- Assessment of whether the role of libraries has changed in relation to local government
- Assessment of the impact of the project on library staff, administration, and trustees regarding

  -Staff development and/or continuing education
  -Staff allocation
  -Policies (service and access).

(2) Assessed the project's benefits to users by

- Developing and administering measurement tools that determined
  - User groups within the K-12, public library, business, minority, senior, and state and local government communities
  - The methods through which the user groups became aware of the project
- Interviewing a cross-section of the project's target communities to determine the level of involvement of such communities with public access to the Internet to
  - Specify systemic use of the public access Internet workstation including, but not limited to, reference interactions, point of use instruction, and integration into the workplace
  - Assess the impact of the Project beyond public libraries (e.g., use by state and local government in improving their ability to perform the duties of their jobs, use by businesses in improving their ability to perform the duties of their jobs, use by citizen groups (e.g., senior, minority) in meeting their non-mediated information needs or for personal enrichment)

(3) Developing measurement devices and methods for SIU and the Office of Commonwealth Libraries to implement at a later date for continued evaluation of the project and its impact of services provided by libraries in Pennsylvania.

(4) Providing a training session to selected SIU and the Office of Commonwealth library personnel in the use and execution of project data collection instruments to facilitate the transition of data collection activities to SIU and Commonwealth libraries personnel after completion of the evaluation.

These evaluation goals and objectives provided a framework that directed the organization of study activities.

Time Line and Project Tasking

The evaluation project began on October 1, 1996, and continued through October 1, 1997. The evaluation comprised three main phases. Phase I was project planning, literature review, introduction to project activities, and development/pretesting of data collection instruments. Phase II included administration of a range of data collection efforts and analysis of the data resulting from those efforts. Phase III focused on assessment of findings/conclusions, development and dissemination of the final report, which included a presentation on the project at the Pennsylvania Library Association Conference, September 1997. In conjunction with SIU and the Office of Commonwealth Libraries, the consultants developed a more detailed project tasking timeline during the first phase of the research project.

Data Collection

The study drew upon a combined qualitative and quantitative approach, selecting data collection techniques that best met the goals and objectives of the study. Qualitative techniques were employed, for example, in the use of ongoing expert review of the assessment techniques, measures, policy analysis, and measurement tool development. The qualitative approaches also assisted the researchers to develop such quantitative measurement tools as user surveys, the training surveys, and the survey of library directors. Quantitative techniques contributed to the development of measures related to public access workstation use, and costs, as well as user involvement with the electronic services.

The evaluation relied primarily on a number of different data collection techniques, including:

- **Focus groups.** The consultants conducted a focus group in February 1997 with librarian participants to inform the development of other data collection instruments; additional focus groups were conducted as part of the site visits.

- **Help desk use logs.** SIU staff tracked the use and duration of requests during selected sample periods.

- **Interviews**. The consultants conducted on-site or phone interviews with library administrators, Project system designers, and various user community members.

- **Surveys.** The consultants incorporated in the site visits as well as three other key efforts:

  - Survey of participants attending the October 1996 and April 1997 training sessions sponsored by the SIU and the Office of Commonwealth Libraries

  - Survey of participating library directors as to their overall perceptions and assessment of the project to date (March 1997).

  - Survey of users of the workstations in participating libraries (May 1997).

- **Site visits.** The consultants observed the use and operation of the public access work stations, interviewed staff and other participating librarians, and conducted a focus group of users at four locations throughout the state of Pennsylvania.

The combination of these data collection strategies allowed the study team to use multiple techniques to investigate various project topics and obtain quality data. Specific steps in the method and data collection were based on proven strategies (e.g., Rossi and Freeman, 1993; Kruegar, 1994; Creswell, 1994). Throughout the process appropriate steps were taken to ensure the collection of reliable and valid data as per standard research practice (Brinberg and McGrath, 1985).

Project Products and Dissemination

The consultants provided the SIU and the Office of Commonwealth Libraries administrators with multiple project products, including:

- Preliminary project findings and updates in January 1997 and June 1997. These updates served to inform SIU and the Office of Commonwealth Libraries staff as to the progress, preliminary findings, and key issues of the evaluation project.

- Data collection tools and instruments for continued SIU and the Office of Commonwealth Libraries data collection activities (included in the final report).
- A training session for selected Office of Commonwealth Libraries staff on the use of the data collection tools and instruments.
- Databases (on disk) of the survey data reported in Chapter 2.
- A final report detailing study findings, methodologies, and data collection tools, findings, and recommendations.

Furthermore, the consultants pursued several dissemination strategies for project findings including presentation of preliminary study findings at the Pennsylvania Library Association annual conference; presentation of project findings at national and state conferences such as the Public Library Association National Conference in March 1998; and submission of articles encompassing project findings to research journals, professional publications, and the ERIC Clearinghouse.

ORGANIZATION AND PURPOSE OF THE FINAL REPORT

This first chapter serves as an introduction to the study and provides background information to set the study in context. Chapter 2 reports on specific data collection efforts including:

- Survey of participants attending SIU and the Office of Commonwealth Libraries training sessions (conducted October 1996 and April 1997).
- Survey of participating library directors (conducted March 1997).
- Survey of workstation users (conducted May 1997).
- Log of SIU help desk requests (October, 1996 - June, 1997).

Chapter 2 also contains additional detail about the data collection methodologies and instruments.

Chapter 3 reports on the site visits at four participating libraries conducted in June - July 1997. These site visits included a range of data collection activities which are described in greater detail in Chapter 3. Chapter 4 offers a brief summary of findings. It also identifies key issues warranting additional discussion, describes some lessons that have been learned from the project, and it provides recommendations as to next steps and strategies for building on the existing momentum created by the project. The appendices include background information regarding the project as well as copies of the various data collection instruments.

The purpose of this final report is to provide a concise description of the evaluation activities related to the OnLine at PA Libraries project. The report is not intended to serve as a history of the project, project activities, or specific levels of involvement and work by various project libraries or other participants. The report documents the success of the project and can serve as a discussion point for all participants as to (1) the successes and problems that arose with the project, (2) key issues that will require additional attention, and (3) planning strategies to continue the effort and successes of public libraries connecting the people of Pennsylvania to the Global Networked Society.

CHAPTER 2

SURVEY AND DATA COLLECTION FINDINGS

The consultants conducted four surveys as part of the OnLine at PA Libraries evaluation project:

- One participating library survey in March 1997 to assess the participating libraries' expectations and issues concerning the OnLine at PA Libraries project (see Appendix B);
- One user survey in May 1997 to determine user satisfaction, demographics, and overall project/Internet assessment (see Appendix C); and
- Two training evaluation surveys, one each for the initial training session in October 1996 (see Appendix D) and the follow-up training session in April 1997 (see Appendix E).

This chapter details the methodologies used to conduct the surveys and presents survey findings.

PARTICIPATING LIBRARY SURVEY

The participating library survey was distributed to all 188 participating library directors in March 1997. Of the 188 surveys, 144 were returned for a 76.6% response rate. Office of Commonwealth Libraries staff, SIU staff, and selected librarians reviewed and commented on preliminary survey drafts. These comments and suggestions were incorporated into the final survey form (see Appendix B). SIU and Office of Commonwealth Libraries staff assisted with non-responding library follow-ups to encourage participation.

General Findings

As of March 1997, participating library OnLine at PA Libraries connections were operational for an average of 4.7 months, with connectivity ranging from .5 to 8 months (see Figure 2-1). The average monthly connection charge was $30.15 per month, with monthly costs ranging from $0.0 to $350.00 (see Figure 2-1).

Figure 2-1. OnLine at PA Libraries Library Connection Costs/Months.

	Average
Average number of operational months for OnLine at PA Libraries connection	**4.7 months** (range: .5 - 8 months)
Average monthly charge	**$30.15/month** (range: $0.0 - $350.00)

Figure 2-2. Primary OnLine at PA Libraries Library Interest.

Original Interest	% Interest
Interest on part of library staff	42.5%
Community interest	32.2%
Availability of computing equipment	16.4%
Board interest	4.8%
Other	4.1%

Library directors indicated that the top three primary motivating factors for participating in the OnLine at PA Libraries project was interest on the part of library staff with 42.5%, followed by community interest with 32.2%, and availability of computing equipment with 16.4% (see Figure 2-2).

Overall, most libraries engaged in some formal advertising activities (e.g., stories in local papers, presentations to local groups) to promote the OnLine at PA Libraries project in their libraries. A vast majority of libraries had between one and five instances of formal advertising as of March 1997 with 82.6% (see Figure 2-3).

Figure 2-3. OnLine at PA Libraries Library Formal Advertising.

Number of Formal Advertising	% Advertising
0 times	9.7%
1-5 times	82.6%
6-10 times	5.6%
11-15 times	0.7%
16-20 times	0.7%
21 or more times	0.7%

Library Training/Users

The survey asked library directors to indicate the number of formal user training sessions the library conducted as well as the average amount of training time new users received from library staff. As Figure 2-4 indicates, a majority of libraries -- 63.2% -- did not provide formal user training sessions. On average, librarians spent 12.1 minutes with new workstation users, ranging from 0 to 35 minutes (see Figure 2-4).

Figure 2-4. OnLine at PA Libraries Library Formal Training Sessions.

Number of Formal Training Sessions	% Training
0 times	63.2%
1-5 times	25.7%
6-10 times	3.5%
11-15 times	0.6%
16-20 times	2.1%
21 or more times	4.8%
Average initial help (in minutes): **12.1 minutes** (range: 0 minutes - 35 minutes)	

Figures 2-5 and 3-6 provide an estimate of OnLine at PA Libraries workstation users. As Figure 2-5 indicates, there is an average of 15.6 children and students uses of the workstation per week, 16.3 adults uses of the workstation per week, and 10.4 library staff uses of the workstation per week (note: one session may not necessarily correspond directly to one user; one user may account for multiple sessions).

Figure 2-5. OnLine at PA Libraries Library Number of User Sessions/Week.

Types of Users	Average Number
Children and Students (through age 18)	15.6 (range: 0-160)
Adults (over 18)	16.3 (range: 0-100)
Library Staff	10.4 (range: 0-80)

Figure 2-6 presents some estimates of the number of users of the workstations per week. These estimates have the following limitations:

(1) They depict a one-use, one-user approach. This may not be the case, as one user may account for more than one use.

(2) They account only for an estimate of OnLine at PA Libraries workstation users and do not extend to other Pennsylvania public libraries providing public access to the Internet.

Figure 2-6. Calculating the Average Number of Users per Week.*

	Using the Average Number	Using the 3rd Quartile
Children and Students (through age 18)	2,933	3,800
Adults (over 18)	3,064	3,800
Total	**5,997**	**7,600**

* Issues: (1) Estimates based on use data collected in March 1997.
(2) Estimates based on 188 participating libraries.

(3) They use library director-provided estimates from March 1997. Other data collected as part of the evaluation project suggest that workstation usage since that time has increased significantly.

With those limitations, an estimated average of 5,997 users use the workstations per week. By using the 3rd quartile, rather than the average, an estimated 7,600 users use the workstations per week (see Figure 2-6).

Benefits and Issues

Library directors consider the top three primary benefits of the OnLine at PA Libraries workstation to be the expansion of available reference resources with 48.3%, followed by the attraction of new users to the library with 31.7%, the expansion of the scope of the overall library collection with 13.1% (see Figure 2-7).

Figure 2-7. OnLine at PA Libraries Library Benefits.

Primary Benefit	% Benefit
Expands availability of reference resources	48.3%
Attracts new users to the library	31.7%
Expands scope of overall collection	13.1%
Can answer specific questions	1.4%
Other	5.5%

Figure 2-8. OnLine at PA Libraries Library Assessment of the Internet and OnLine at PA Libraries Connection.

Issue	Average Agreement
Providing public access to the Internet has greatly increased the visibility of the library	2.3
Library staff have very good knowledge and skills related to using the computing equipment provided through the OnLine at PA Libraries grant	2.8
Library staff have very good knowledge and skills related to using the Internet	2.9
Overall, we are impressed with the range, extent, and scope of reference material available on the Internet	1.9
We have had considerable difficulties with users accessing and reading pornography via the public access Internet workstation	4.5
Generally, the comments from the users of the public access Internet workstation are very positive	1.7
We have had very few technical difficulties with the equipment provided by the grant	2.3
1=Agree	**5=Disagree**

As Figure 2-8 indicates, the library directors rate the OnLine at PA Libraries project highly along a number of dimensions -- library visibility (2.3 out of 5, with 1 being "Agree"), collection expansion and augmentation (1.9 out of 5, with 1 being "Agree"), and user impressions (1.7 out of 5, with 1 being "Agree"). Of particular interest is that library directors indicate no problems with users accessing pornographic material (4.5 out of 5, with 5 being "Disagree").

Finally, although library directors view the OnLine at PA Libraries project as a success, few could afford to access the Internet without the project (see Figure 2-9). A vast majority -- 88.9% -- indicated that they would have been willing to pay for the workstation, but could not afford to do so.

Figure 2-9. OnLine at PA Libraries Library Purchase on Own.

Types of Users	% Purchase
Yes	2.7%
Yes, but unable to afford without the Bell Atlantic grant	88.9%
No	2.0%
Not Sure	6.2%

USER SURVEY

As part of the evaluation study, the consultants conducted a user survey in all participating libraries. The survey sought to obtain (1) an estimate of the number and types of users accessing the Internet via the OnLine at PA Libraries terminals in the participating libraries, (2) a description of that use, i.e., the types of resources and services users contacted, (3) an assessment of the usefulness of those resources and services contacted, and (4) an assessment of the usefulness of the OnLine at PA Libraries project as a means of access to the Internet.

Background

During a sample one week period in May, *all* 188 participating libraries assisted the investigators to collect data regarding the public's use of the Internet. Prior to that sample week period, a packet of information that included instructions and data collection forms were distributed to participating libraries at the OnLine at PA Libraries spring training sessions. Participants were also informed of the purpose, intent, and importance of the user survey to the OnLine at PA Libraries assessment project during these training sessions.

Data Collection Instrument

The consultants developed the two-page survey (see Appendix C) as a means for OnLine at PA Libraries workstation users to provide data concerning (1) their general familiarity with the Internet, (2) the utility of selected Internet-based resources, and (3) their impressions of the Internet in general and OnLine at PA Libraries project in particular.

Selected OnLine at PA Libraries project staff reviewed the initial survey. Based on comments from that review, the consultants revised the survey. The revised survey was then pre-tested by two MLS students at the School of Information Studies, Syracuse University. Comments and feedback from this pre-test were then incorporated into the final survey.

Survey Distribution Technique

During the one-week sample period in May, all participating libraries asked up to 25 users of their OnLine at PA Libraries workstation to complete a survey. A librarian or volunteer gave the users the survey, explained to them the purpose for collecting the data, and instructed the users in the completion of the survey.

The librarian or volunteer instructed the users to complete Part I of the survey *prior* to accessing the Internet, complete Part II *while connected* to the Internet, and complete Part III *after* their Internet session. At the end of the sample week or having completed 25 surveys (which ever came first), all completed questionnaires were returned to the investigators for analysis. Of the 4,700 distributed surveys, 1,925 usable surveys were returned for a 41.0% response rate.

User Demographics

As Figure 2-10 shows, slightly more females (51.8%) use the workstations than males (48.2%). The average user age is 29.1, ranging from 10 to 81 years (see Figure 2-10). A majority of users -- 56.6% -- have a high school or elementary education level, with the remaining 43.4% having a community college or higher level of education (see Figure 2-11). Readers should keep in mind that a substantial percentage of users -- approximately 35.3% -- are elementary and high school students.

Figure 2-10. OnLine at PA Libraries Users.

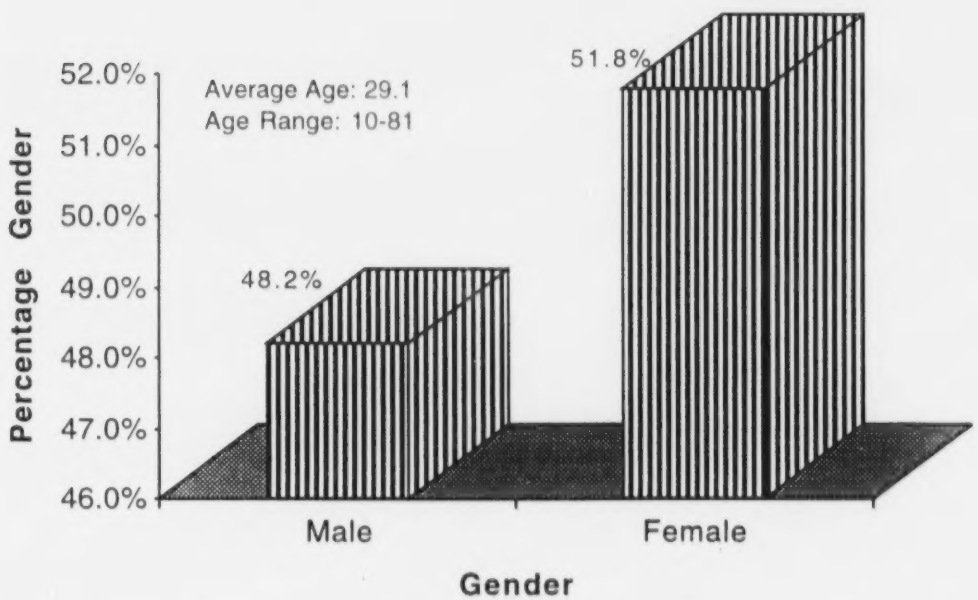
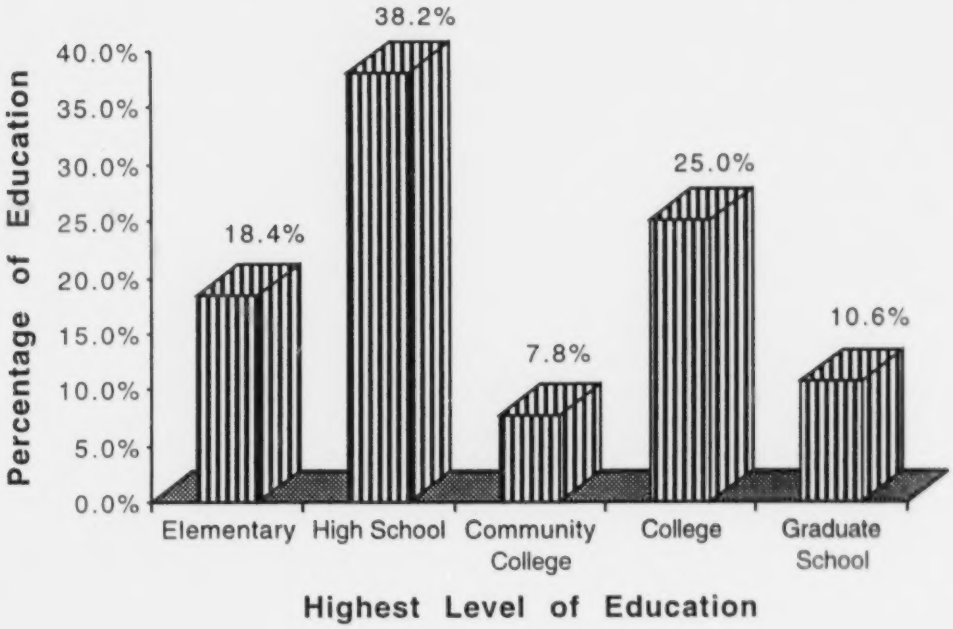


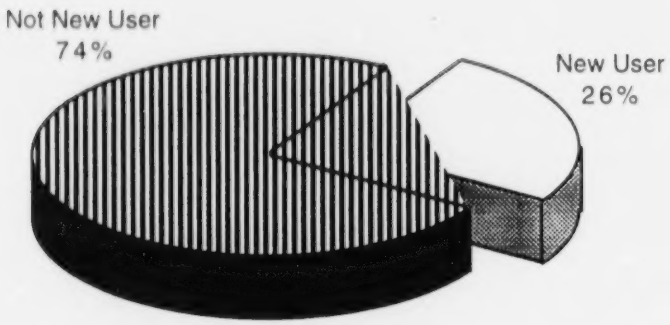
Figure 2-11. OnLine at PA Libraries User Education.



Users and the Internet

The OnLine at PA Libraries workstation attracted a substantial percentage -- 26.0% -- of new users to participating libraries (see Figure 2-12). Of all the users, 47.6% rate themselves as beginner users, 8.3% as intermediate users, and 44.0% as expert users of the Internet (see Figure 2-13). As Figure 2-13 also indicates, the typical user had an average of 8 months' experience in using the Internet and had used the library's OnLine at PA Libraries workstation 5 times in the past month. A vast majority of users had not formal Internet training with 64.7%, while 21.9% of users had between one and three hours of formal Internet training, and just 13.4% had more than three hours of formal Internet training (see Figure 2-14).

Figure 2-12. Percentage of New Users Due to OnLine at PA Libraries Program.



Of particular interest is that 34.5% of the OnLine at PA Libraries workstation users have no other Internet access means other than through the public library (see Figure 2-15). It is noteworthy, however, that 63.5% of the workstation users *do* have other means with which to access the Internet and continue to use the library's Internet connection.

Overall, users found their experiences with the OnLine at PA Libraries workstation and Internet to be positive, with ratings of their experiences ranging from 1.7 to 2.4 (with 1=Very Much So and 5=Not At All) (see Figure 2-16). Of particular interest is that users found the information they wanted on the Internet and found it to be useful, found the equipment/workstation easy to use, and would tell other members of the community about the library's Internet connection. It is also noteworthy that the users' ability to use the equipment and find the information that they wanted via the Internet was not affected by the level of formal Internet training that users had (see Figure 2-17). Indeed, users were able to make similar use of the workstation and the Internet regardless of the amount of formal training.

Figure 2-13. OnLine at PA Libraries User Expertise.

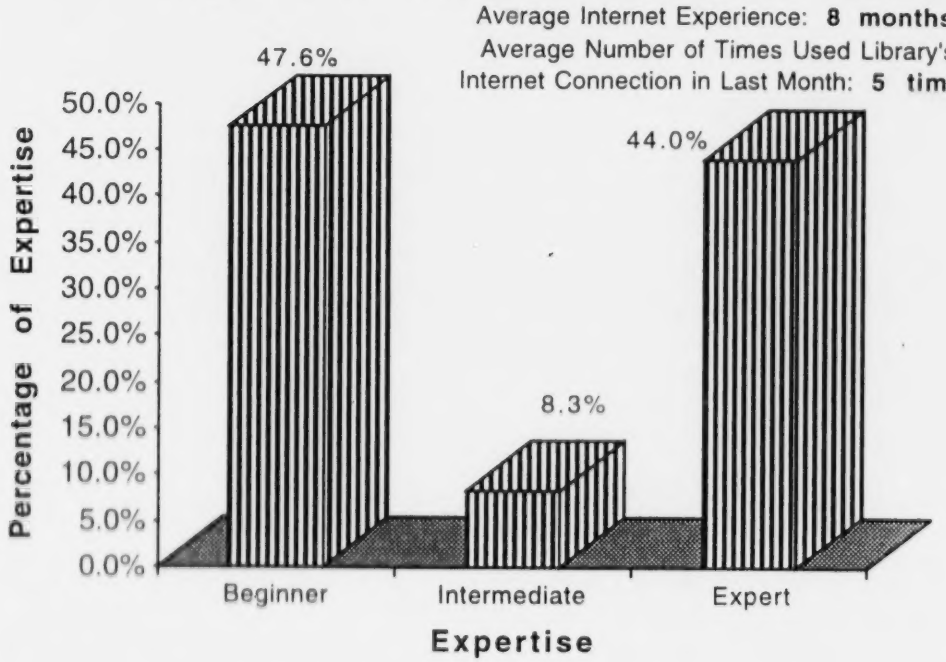


Figure 2-14. Formal Internet Training of Users.

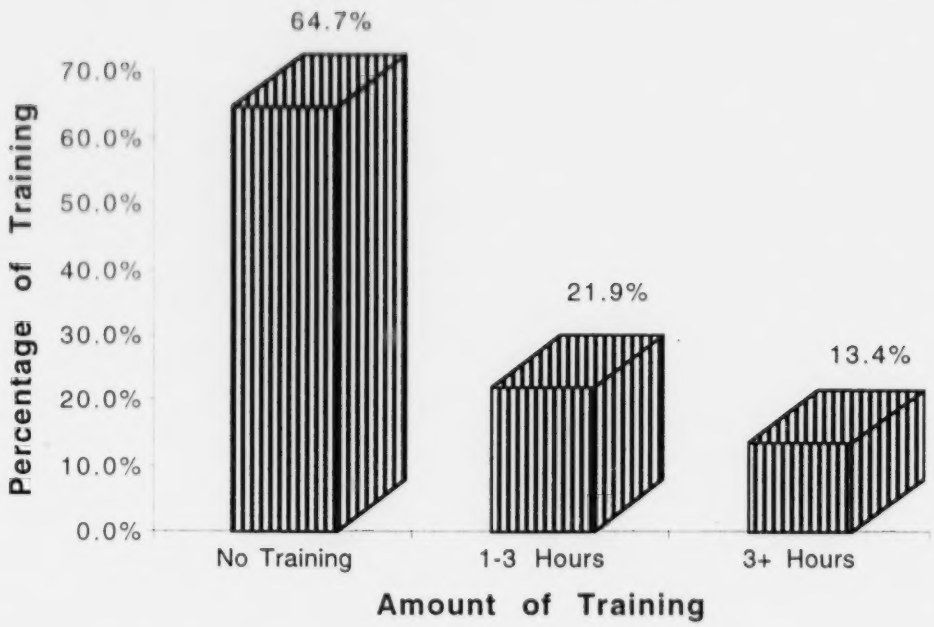


Figure 2-15. OnLine at PA Libraries User Other Access to the Internet.

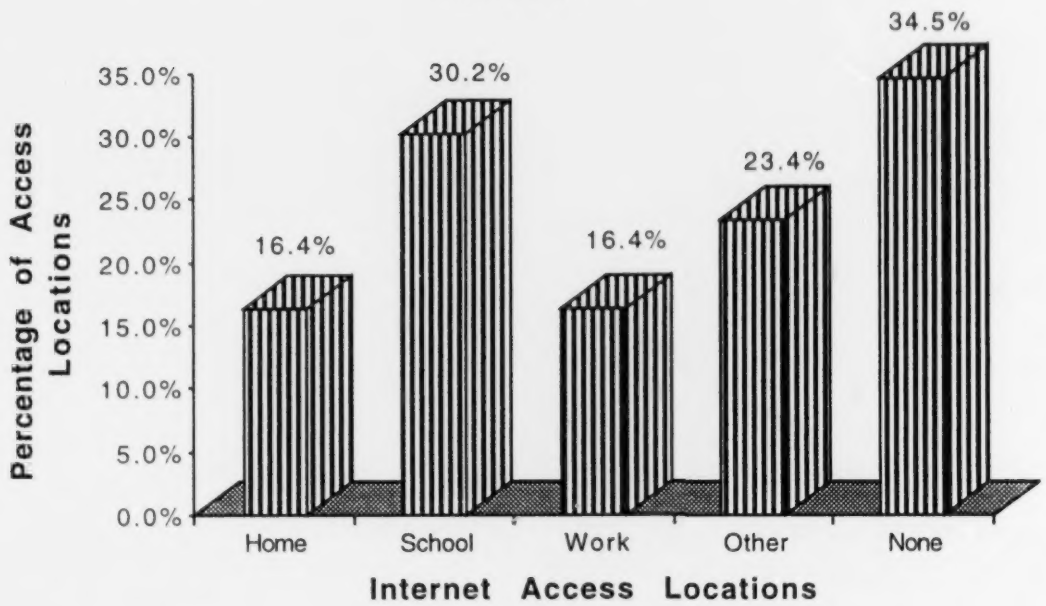


Figure 2-16. OnLine at PA Libraries User Assessment of the Internet and OnLine at PA Libraries Connection.

Internet Assessment	Average Assessment
While on the Internet, I found the information that I came to the library to obtain	2.2
While on the Internet, I found information that was very useful and interesting	1.9
The Internet information I located will assist me greatly	2.2
The Internet access provided by the library is relatively easy to use	1.8
Having access to the Internet via the library is very important to me	1.7
The computer and telecommunications equipment all worked very well	1.8
I found the speed of the Internet, e.g., loading graphics and downloading information, to be quite good	2.4
I would tell other members of the community about the library's Internet connection	1.7
I was able to use the Internet without library staff or other assistance	2.0
1=Very Much So	**5=Not At All**

Figure 2-17. OnLine at PA Libraries User Assessment of the Internet and OnLine at PA Libraries Connection by Amount of Training.

Internet Assessment	No Training	1-3 Hours Training	3+ Hours Training	Overall Assessment
While on the Internet, I found the information that I came to the library to obtain	2.2	2.2	1.9	2.2
The Internet access provided by the library is relatively easy to use	1.8	1.7	1.6	1.8
I would tell other members of the community about the library's Internet connection	1.7	1.6	1.5	1.7
I was able to use the Internet without library staff or other assistance	2.2	1.8	1.5	2.0
	1=Very Much So		**5=Not At All**	

TRAINING SURVEYS

The consultants conducted two training surveys. The first survey occurred during the initial project training session in October 1996 (see Appendix D), and the second during the advanced training session during April 1997 (see Appendix E). The purpose of the surveys was to determine the:

- Extent to which the training sessions met the needs/anticipated needs of the attending librarians;
- Ability of attending librarians to apply training instruction in their libraries;
- Ability of attending librarians to begin and/or enhance ongoing Internet training activities in their libraries; and
- Overall impression of the OnLine at PA Libraries project in training participant libraries.

Together, these data serve to inform the project's training process for future training sessions.

Initial Training Session

All participating libraries had to send one participant to the initial training session in October 1996. This training session provided attendees with instruction on:

- Workstation configuration and general workstation operation;
- How to set up the workstation in the library;
- How to connect to an Internet Service Provider (ISP); and
- General Internet navigation.

The training session lasted one day.

Methodology

The initial training session began prior the commencement of the evaluation project. Thus, surveys could only be collected from participants at the latter training sessions. The consultants used the training lesson plan and documentation to develop a draft survey. Project staff provided feedback on the draft survey, and changes were made to the draft survey to reflect staff comments and suggestions. Each attending representative received a copy of the training evaluation form at the end of the training session. Since only a portion of the training sessions received the survey, a total of 55 completed surveys were returned.

Findings

Of the attending trainees, 50.0% were professional librarians with MLS degrees, and 50.0% were non-professional library staff (sample titles included clerks, library administrator, and volunteer). The attendees had an average of 11.4 years experience, ranging from 1 year to 24 years.

Overall, attendees rated their Internet navigation skills as "below average" with 43.6%, followed by "average" with 38.2%, "above average" with 16.4%, and "excellent" with 1.8% (see Figure 2-18). Attendees rated their computing skills slightly higher than their Internet navigation skills with 43.6% indicating "average" computing skills, 29.1% "below average" computing skills, 25.5% "above average computing skills, and 1.8% "excellent" computing skills (see Figure 2-18).

Figure 2-18. Initial Training Participant Internet and Computer Expertise.

Expertise Rating	Internet Navigation Skills	Computer Use Skills
Below Average	43.6%	29.1%
Average	38.2%	43.6%
Above Average	16.4%	25.5%
Excellent	1.8%	1.8%

Attendees strongly agreed that there is significant interest in the OnLine at PA Libraries project at their respective libraries (rating of 4.4, with 1=Strongly Disagree and 5=Strongly Agree). Similarly, attendees strongly agreed that having access to the Internet can be useful for rural libraries (rating of 4.7, with 1=Strongly Disagree and 5=Strongly Agree) (see Figure 2-19).

Figure 2-19. Initial Training OnLine at PA Libraries Project and Internet Assessment.

OnLine at PA Libraries/Internet Assessment	Average Assessment
There is a great deal of interest in this project at my library	4.4
Internet-accessible resources can be useful in a rural library context	4.7
1=Strongly Disagree	**5=Strongly Agree**

Figure 2-20. Evaluation of Initial Training Components.

Training Component	Beginning of Day	End of Day	Ability in Library
URL Addressing	2.7	3.8	3.7
Netscape Navigation	2.6	3.8	3.8
Dialing Internet Service Provider	2.4	3.7	3.7
Setting Up PC/Printer	2.6	3.9	3.8
Printing Documents	3.3	4.0	4.0
1=Not At All			**5=A Great Deal**

As Figure 2-20 shows, the training session successfully assisted attendees gain the necessary skills to set up the OnLine at PA Libraries workstation, connect to the Internet, and make basic use of Web-based resources.

Overall, attendees rated the training session highly (see Figure 2-21). Indeed, attendees found that the training met their goals, the presentation of the material was clear, the trainer was well prepared, and that they had a basic sense of how the Internet works (ratings ranging from 3.7 to 4.5, with 1=Not At All and 5=Very Much So). Attendees indicated some concern over the amount of material covered during the session (rating of 2.3); however, as comments and the self-assessments indicated, attendees possessed varying levels of computer/Internet sophistication. The training session was targeted to provide only basic Internet and computing skills, thus some attendees found the material relatively easy.

Figure 2-21. Initial Training Overall Assessment.

Internet Assessment	Average Assessment
My goals for this training session were met	3.8
The ideas presented in this training session were very clear	4.0
There was sufficient opportunity to ask questions during the training session	4.5
Overall, the trainer(s) was well prepared	4.5
There was too much material covered in this training session	2.3
I feel like I now have a good basic understanding of how the Internet works	3.7
Please estimate the degree of difficulty you will have in configuring the hardware/software for this project when you return to your library	2.7
1=Not At All **5=Very Much So**	

Spring Training Session

OnLine at PA Libraries project staff designed the spring training session, conducted in April 1997, to provide advanced instruction on managing Internet-based resources for library use. In particular, the training session covered such topics as:

- Using Web-based search engines;
- Constructing appropriate searches for particular Web-based search engines;
- Identifying and using Web-based reference resources;
- Downloading files and software from the Web; and
- Using Fortress, the security program loaded on each OnLine at PA Libraries workstation.

OnLine at PA Libraries project staff designed the training topics based on input from the participating libraries.

Methodology

Each participating library was able to send up to three staff members to the training session. Training occurred in multiple locations -- with adequate training facilities -- so as to minimize travel for library staff.

The consultants used the training lesson plan, documentation, and discussion with project staff to develop a draft survey. OnLine at PA Libraries project staff provided feedback on the draft survey, and changes were made to the draft survey to reflect staff comments and suggestions (see Appendix E for a copy of the survey).

Each attending representative received a copy of the training evaluation form at the end of the training session. A total of 368 completed surveys were returned.

Findings

The time lapse between training sessions, which allowed for librarians to develop familiarity with the Internet, had an impact on the Internet expertise of attendees. Overall, attendees rated their Internet navigation skills as "average" with 53.2%, followed by "below average" with 26.5%, "above average" with 18.9, and "excellent" with 1.4% (see Figure 2-22). Thus, as compared to the initial training session (see Figure 2-18 above), more attendees had greater Internet expertise.

As Figure 2-23 indicates, the training session was particularly successful in instructing attendees on how to search the Web, use Web-based search engines, access government documents on the Web, identify/use reference resources on the Web, and create and organize bookmarks. The session was less successful in providing attendees with instruction on downloading Web files, downloading Web-based software, and using Fortress (the workstation security program).

Figure 2-22. Spring Training Participant Internet Expertise.

Internet Navigation Skills	Percentage Skill
Below Average	26.5%
Average	53.2%
Above Average	18.9%
Excellent	1.4%

Figure 2-23. Evaluation of Spring Training Components.

Training Component	Beginning of Day	End of Day
Searching the Web	2.9	4.0
Using Web-based search engines	2.7	3.9
Accessing government documents on the Web	1.8	3.4
Identifying/using reference resources on the Web	2.4	3.7
Creating and organizing bookmarks	2.3	3.7
Downloading Web files to a diskette	1.7	2.7
Downloading software from the Web	1.7	2.5
Using Fortress	1.6	2.8
1=Not At All		**5=A Great Deal**

Figure 2-24. Spring Training Overall Assessment.

Internet Assessment	Average Assessment
My goals for this training session were met	1.9
The ideas presenting in this training session were very clear	1.7
There was sufficient opportunity to ask questions during the training session	1.5
Overall, the trainer(s) was well prepared	1.4
There was too much material covered in this training session	3.5
I feel like I now have a good basic understanding of how to use the Internet as a reference tool	1.9
I will now be able to use the Internet to answer reference questions	2.0
The Internet will be a welcome addition to our library's reference tools	1.4
1=Strongly Agree	**5=Strongly Disagree**

Overall, the attendees rated the spring training session highly in all aspects (see Figure 2-24). Attendees found that the trainer was well prepared, the course material was presented clearly, participants were able to ask questions, and the course had the right amount of content. Perhaps more importantly, participants felt that the training would enable them to go back to their libraries and use the Internet as a reference tool.

The training also provided attendees with the necessary skills, desire, and willingness to begin and/or engage in increased user/librarian training activities. In particular, attendees indicated that they would provide training to other library staff (76.4%) and the public (70.9%).

Finally, attendees of the spring training session rated the OnLine at PA Libraries project as "very successful" (1.0, with 1=Very Successful and 5=Very Unsuccessful).

HELP DESK LOGS

The study team reviewed the help desk logs maintained by SIU staff from October 1996 through June 30, 1997. SIU staff designed the help desk logs (see Appendix F) to:

- Track problems and issues that participating libraries faced while using the project equipment;
- Track problems and issues that participating libraries encountered while using the Internet;
- Determine what, if any, trends in calls that the SIU received so as to design future training programs and interim help memos to distribute to participating libraries;
- Serve as a liaison between participating libraries and service technicians, thus be able to determine the necessary support for participating libraries -- SIU or other; and
- Plan for future project needs.

The logs, therefore, provided the SIU and other project managers with valuable feedback on the OnLine at PA Libraries project's implementation.

When the SIU received a help desk call, an incident report (log) was initiated. The problem was identified, described, and attempted to be resolved immediately. If immediate resolution was not possible, the incident report was considered open until formal problem resolution was attained.

Overall, a review of the help desk logs show the following trends:

- Calls received at the beginning of the project involved hardware/software set up and configuration issues, problematic hardware (e.g., bad monitors, faulty modems), and establishing an Internet connection;
- Calls received once the PCs were up and running expanded from set up to usage issues -- e.g., how to configure and use Netscape; and
- Although relatively few, some calls indicated the need for periodic PC reconfiguration to the original settings due to user-made modifications to the system configuration and librarian error.

These trends reflect the cycle of systems implementation issues -- from implementation to general usage.

SUMMARY

The data from the various surveys and help desk log file analysis indicate that the:

- OnLine at PA Libraries program is highly successful;
- Internet serves to increase the scope and range of library collections and reference material;
- Librarians are better able to answer patron questions;
- Public holds the libraries in higher regard due to the workstations, and wants an *expansion* of the project through additional workstations, training, and facilities;
- Help desk log files can assist project managers determine project hardware, software, and configuration usage issues; and
- Training sessions (initial and spring) were successful in providing attending library staff with the skills necessary to install and use the workstation as well as how to best use the workstations for improved services delivery.

These data suggest that based on a number of different criteria, different surveys, and responses from different types of individuals, i.e., library directors, library staff, and the public, the OnLine at PA Libraries project accomplished its objectives and was very successful. Indeed, data presented in the next chapter that describes the site visits reinforces the findings presented from the surveys reported in this chapter.

CHAPTER 3

SITE VISITS

One key component of the data collection activities for the OnLine at PA Libraries project evaluation effort was site visits to four libraries participating in the project. The site visits provided the evaluators with: (1) an opportunity to meet with the site's library directors; (2) site library staff; (3) library directors and staff from surrounding libraries; and (4) users of the public access Internet service provided at the site libraries. This Chapter provides background information regarding the method employed for the data collection effort at the sites and a summary of the findings from each site.

INTRODUCTION

The investigators conducted the site visits during the months of June and July 1997. The objectives of the site visits were to:

- Observe the set-up and use of the public access Internet workstation and connection;
- Meet with the library directors, staff, local area librarians, and users to obtain their comments and assessment regarding project activities and the use of the public access Internet workstation and connection; and
- Identify factors that affected the overall success of providing public access to the Internet via the OnLine at PA Libraries project.

These objectives guided the development of the data collection activities employed for the site visits.

In discussions with officials from the Office of Commonwealth Libraries, the investigators developed the following set of criteria to select site libraries:

- *Geographic region.* To obtain geographical representation throughout the state, the investigators defined four regions. The regions were the northeast, southeast, southwest, and northwest/central.
- *Rural designation.* A key component of the OnLine at PA Libraries project was to provide public access to the Internet in rural areas of Pennsylvania. An emphasis on rural libraries, through population density data, was therefore critical.
- *Workstation.* Site libraries had to have at least one OnLine at PA Libraries workstation that had an Internet connection as of February 1997.
- "Representative" library. Each site library needed to be a "typical" library within the region.

Candidate libraries within these regions were identified within the geographic regions using these criteria with assistance from the Office of Commonwealth Libraries staff.

During May and June 1997, the investigators contacted the directors of the libraries to confirm dates for the one-day visit. They sent each library director a letter detailing the schedule and proposed activities for the visit. The letter described topics that would be discussed in the various data collection efforts during the visit (see Appendix G). Each site visit included the following data collection activities:

- Selected documents and library background information provided to the investigators prior to their visit as well as collecting additional items while at the library;
- Interview with the director of the library;
- Group interview with library staff who had been involved in the planning or use of the public access Internet workstation;
- Focus group session over lunch with near-by library directors who also were participants in the OnLine at PA Libraries project;
- Focus group session with users from that library of the public access Internet workstation; and
- Follow-up phone conversations with the directors of the library (when needed) for additional information or clarification of the information obtained.

All libraries were extremely helpful and cooperative in assisting the investigators organize the site visits.

At each library typically there were two to four library staff interviewed; five to nine neighboring library directors interviewed; and six to 13 users in each of the focus groups. The investigators asked all participants and users to complete a questionnaire that obtained background information as well as their assessment of selected key issues (see Appendix H and I). The library directors were especially successful in obtaining participation from library users for the focus group sessions.

Both investigators participated in the site visits for libraries A and B. Then each did one additional library -- C and D. This strategy was important as a means for the investigators to fine tune the techniques and instruments during the first two visits together. Information from each of the visits informed later ones as to discussion topics and techniques. Each investigator developed notes from the sites which were then organized into this report that summarized findings for each library.

Thus, the following four summaries for each of the libraries are not verbatim accounts of the various data collection activities as described above. Rather, the investigators have organized the content into key topics and reported them below. A significant amount of information from lengthy notes, the questionnaires, and background information has been distilled into the following summary.

LIBRARY A

The library's budget is $120,000 with approximately $20,000 for books and $1,500 for periodicals. The library is located in a county with a population of 47,800; the population served is 27,000, but it also serves a significant number of individuals from around and outside the county. The facility was renovated in 1987 and has about 4,000 square feet. Only 4% of the county residents have a college degree. There are four Full Time Equivalents (FTEs), one part time and one student; the library is open 63 hours per week. The library works with two library boards -- a county governing board and a system board that is more advisory in nature. The area is economically depressed although there are some small businesses. Agriculture is an important component of the local economy as well as "traffic from the Turnpike."

Interview with Director

Initially the director was reluctant to jump on this project due to his perceived lack of technical sophistication and awareness of computers in the beginning of the project. Further, the library had very tight resources, limited staff (who were not knowledgeable about computers), and limited time. At the time of the site visit he was *very* impressed with the workstation and provision of public access Internet use. He was *very* glad that this library had been part of the project as Internet access would not have occurred without such participation. And, he thought that the amount of time and effort dedicated to this project was not as extensive as he originally thought.

Set-up and Connectivity

The library received the workstation in October 1996; there was a 2-3 week delay in obtaining an Internet Service Provider (ISP) and phone line. The actual set-up was not a problem. The initial ISP went out of business; now they have a local provider who charges $19.95/month; the phone line is $30/month; and they spent $200 for installation. ($760 per year). The library has not explored leased line possibilities as yet and was unaware of leased line as an option for better and faster connectivity.

Library's IT Infrastructure

The library has four PCs -- OnLine PA; Access PA; and two OPACs that connect to the server. The director was very interested in how a LAN/networked approach might be developed rather than the "stand alone" approach currently in place. He would welcome some training from the DLC or other sources on IT planning and how to maximize impact of computing in the library and on services. One of the investigators explained benefits of a networked strategy and he was very interested in such applications in this library. He said he would ask the DLC for workshops and information on IT planning and networks.

Support for Information Technology

The bottom line is that there is no money available for computers and information technology either in the library budget or from new sources in the county. The library was $8000 short in revenue this year which, if not for a fund raising effort that covered most of the shortfall, would have been taken out of the book fund. The director is interested in advice and planning information for what to do next to support computing efforts at the library given this situation. He is well aware of the need for upgrades and additional equipment but not sure how or if this can be done without state aid.

Perspective of the Boards

The county board was pleased with the project and the library's participation in it, although such participation and increased county visibility did not translate into more resources. The system's board has little involvement in the project. By and large board members are not familiar with the Internet or computers. The director would like the board members to become more knowledgeable about the public access workstation.

Staff Interest

Generally, the staff were not technologically literate about computers and had some significant hesitation about using the public access workstation. The director has probably been the heavier user of the workstation although staff are now "beginning to come around." Some of the staff thought the workstation would be "an albatross" and require too much time and effort. They were also concerned about the use of the computer to access pornography. Staff, for a variety of reasons, have yet to attend formal training sessions on the Internet or computers in conjunction with this project.

Visibility and Credibility

The director believes that the public access terminal has been helpful in raising the overall visibility/credibility of the library within community. He thinks that the workstation's presence directly helped with this year's annual fund drive which raised $8000 rather than the usual $2500-$3000. It is clear that a number of library users are pleased and impressed with the new service. He also noted that change comes slow in this county and that significant visibility of the public access service will take time.

Users

The director believes that Internet users are more than 50% male while the usual library user is 80-85% female. Internet users are usually "middle class, business professional" which is a group that does not normally come into the library. There is little use by the high school although it is across the street. Those students that do use the workstation are the "responsible ones." Apparently there are few terminals for the students in the schools currently, but this will change in the next year as some access and training will be provided. The director thinks that for some workstation users, they come to the library to use it for a while, are impressed, go and then try to get a connection at home.

There has been only one problematic user. He stayed on all day using chat rooms; when asked to cut back he got upset and wrote a letter to his state representative complaining about being denied access. There have been no other problems, but they intentionally put the terminal within view of librarians and close to the main desk. Initially they had a "no one under 18" policy without signed parental consent, but dropped the requirement due to the responsibility of students that were using the terminal. The library is considering a new policy/parental consent form.

Services

The director provides assistance to users "as best I can." He believes that the staff are "coming around" to providing assistance although there are some elderly staff who will probably never learn to use the computer and especially the mouse. Most of the users are self taught and get "minimal" assistance from the library staff. The director may have been too modest about his involvement as later in the user focus group participants regularly complimented him for all of his time and assistance in using the workstation for reference help. The director indicated that he has developed his own set of bookmarks for the patrons. He stated that he sees himself as competent enough to get the average user on the right track, but may not be able to help more sophisticated users.

Training

The director attended the first OnLine at PA Libraries project training session and was not impressed with it or the training. He left with the impression to *not* call for help if needed. He was very frustrated by not being able to obtain the password to Fortress to change settings for display colors, resolution, modem settings, etc. He did comment that the handouts were good. The second session he enjoyed, learned a great deal, and found the focus on reference very helpful. The instructors at this session were much better, in his view, than those at the first session. His staff, however, would not attend. The director provided them with copies of handouts and some instruction from the session. He was not sure how much the staff read or used the handouts. He thought there was too great a lag time between the first and second session.

Impacts

There have been a number of important impacts from the library's participation in this project. First, the director sees himself as much more technically literate and interested in technology applications and uses in the library. He is very impressed with the public access Internet service and sees huge potential for its use as a reference tool and for other services. He hopes that the workstation's presence will also be a catalyst to move staff into greater interest and use of computers and technology.

In addition, he has received numerous comments from library users as to the importance and success of the workstation. Despite some recent difficulties with their service provider, there is constant use of the workstation. Some of the users have "congratulated" him for having the public access terminal as it is the only means by which they would be able to access and use the Internet.

Finally, he thinks the public access terminal, although not directly helpful in obtaining additional funds from the county, did help him in fundraising and will help in the future. The "aura" of having the public access terminal makes the library look like it is "really in the information age." He plans on future fundraising efforts to take more advantage of the "presence" of the computer. The long term issue of raising expectations with the presence of public access to the Internet without adequate funding and technology knowledge has him somewhat concerned.

Staff Interviews

The investigators met with two full-time staff. One had worked for the library 20 years, the other for two years. When the library applied to participate in the project they had "mixed feelings." They were skeptical as to "who would want to use the Internet in this county?" They were a bit fearful about having to learn how to use it themselves and being able to show how to use the workstation to others.

They have started using the workstation, but they characterized themselves as "slow to learn." Patrons started coming in and taught them and the director how to use the workstation and the websites. The two staff indicated that they really rely on sophisticated users to learn from, *if* they are willing to show them. Guides that came with the computers were problematic; hands-on use was better.

Publicity

There have been a few articles in the local paper about the new service. There has also been a story in a local Vo-Tech newsletter. Generally they believe that the publicity has come from word of mouth among library users. They thought more publicity was being developed.

Users

They thought that the users represent a diversity of ages -- young to old, but mostly under 55 and between 25 and 50. They believed that the users were split relatively evenly between men and women and that they came from all economic levels, but predominantly blue collar -- which is the nature of the county. They thought that some have Internet access at home , but that the library's connection was "better" or maybe "faster." They also believe that the public access to the Internet attracted new users who had not previously used the library. "More than half of the users just use the Internet; they don't check out books." Use of the workstation continues to increase and as the students become aware of the access and learn about the Internet at school, use will probably "take off."

Except for the one instance with someone using the chat rooms extensively (see above) there have been no problems with improper use of the workstation or with pornography. The staff believe that with the workstation so close to the main desk, people would be too embarrassed if "caught viewing porn." If kids begin using the workstation a lot, however, problems might increase.

Assistance to Users

In terms of assisting users, they try to help as best they can; they give a brief tutorial -- but they noted that they only have limited knowledge and limited time to provide such tutorials. The amount of help they can provide someone really depends on how busy the library is and the availability of someone who knows enough to help the user. These staff begin work at noon on Mondays so the director is there alone to help that morning. They also rely on him for "more advanced help." One staff member commented that generally it is the younger people who know how to use the workstation. They both recognized that they needed more training and confidence in using the workstation but were unsure how they would get it or become "expert" at the computer.

Some patrons continue to offer suggestions for changes in the set-up of the computer -- including settings on the PC. The initial password protection was an issue that frustrated them: couldn't change things, but they were not technically competent to do so. They eventually relied on some users to help with configuration changes.

Problems

The public access creates problems for the librarians because the librarians cannot get access to the workstation and use it for reference questions/sources since it is usually being used by the public. Without a workstation that they can use regularly, they believe that their "comfort level" with the terminal will not increase. Both felt that they needed an additional terminal at the reference desk just for

librarians. It is a bit embarrassing that the patrons know more about the workstation and the Internet than the staff.

They noted that the ISP problems in obtaining reliable connectivity created problems for them and users. A number of uses were quite frustrated in not being able to use the workstation when they came to the library. The new provider seems to be much better.

Training

For a range of reasons, the staff had not been very interested in training -- "not enough time," "too much work to do," "computer was complicated," etc. Since they did not attend the second project training session (although the director asked them to attend), they still felt some unease at using the public access workstation. One of the investigators noted that there were some easy things they could do to help themselves:

- Sign up for time at the workstation to be sure that they had an opportunity to use the workstation and have "hands-on" experience.
- Have regular staff meetings once a week (including the director) to discuss use of the workstation and "favorite" sites that were good for reference.
- Purchase a couple of trade magazines like *Internet World*, or *NetGuide*, to help them learn about good websites and other information about the Internet.
- Take advantage of local training opportunities.

They agreed that these were good ideas. But it is unclear if the strategies would be implemented.

Conclusion

The two staff interviewed were generally positive about the provision of public access to the Internet in their library. It probably has been a "good thing" for the county. Both circled "3" (1 = unsuccessful, 5 = very successful) when assessing the success of the OnLine at PA Libraries project on their questionnaires. They were unsure about how it might be integrated into traditional library services and how they might better use the workstation. Throughout the session they noted their need to better learn how to use the workstation and provide better reference service, but they seemed to have some hesitancy about developing those skills.

Luncheon Focus Group with Neighboring Librarians

Over lunch, the investigators met with five neighboring librarians who had participated in the OnLine at PA Libraries project and the director of the library at the site visit (six librarians total). Their budgets ranged from $34,000 to $85,000. The populations of their communities ranged from 4,500 to 13,000. They described their communities as "remote, rural, and to some degree, economically depressed." Some of the libraries were open less than 40 hours per week and were "one or two-person" libraries.

These were especially dedicated librarians. Many worked hours at the library well beyond that for which they were paid. All of the librarians were enthusiastic about the project and pleased to discuss their involvement in it. Their general view of the project was "its GREAT," "the State Library did an outstanding job working with Bell Atlantic to do this," and "people love it and appreciate it."

Set-up and Connectivity

These librarians reported no significant problems with the set up of the workstation although one eventually had problems with the monitor. It took over a month to successfully fix the monitor and was quite a frustrating experience. Three of the librarians reported having problems with the ISP and having reliable connectivity. Problems included two ISPs going out of business, poor reliability, and the connection just going down unexpectedly. Costs for the connectivity were reasonable -- usually $20-$30 per month although some indicated that it could be a problem for their budget.

Users

There was some agreement that most of the users were younger folks as well as students. One library was in a school district where students had some access to the Internet and thus, knew how to use the workstation. This library had heavy use of the public access terminal by kids. They all expect increased use by kids as the schools provide Internet access and training. Some thought that there would be an "avalanche" of students this summer.

There was some variance across these libraries in terms of the nature of the users. In some instances new users came to the library as a result of the Internet access. In other instances the Internet users were the same users that always came to the library. One explanation for the possible difference was that some of the libraries had made a number of efforts to publicize the availability of the connection; these appeared to be the ones that then had "new" users. Most agreed that the users were often repeat users in that they used the Internet access regularly.

User Assistance

A very real problem for these librarians was being able to provide user assistance and run the library at the same time. Oftentimes they were in the library by themselves and providing instruction on the use of the workstation could not be done given "a line at the reference desk and the phone ringing." The level of assistance provided to users varied in light of how busy the librarians were with other tasks. Usually a short introduction to the workstation and basic URLs was all users needed. One librarian commented that the "hand holding" it took to get elderly folks to try the workstation and use it was "ridiculous." And that even after that effort, the user gave up in frustration.

Need for Second Workstation

These librarians were emphatic about the need for a second terminal that was intended primarily for reference work and available only, or mainly, to the librarian. In most cases, it was very difficult for the librarian to use the terminal because others were on it. Plus, trying to learn how to use the terminal while with a user is difficult and oftentimes very embarrassing. They thought that if they were going to be good on the Internet they needed their own terminal.

While they all were extremely impressed with the sources and information that one could get off various websites, they will not be able to take advantage of the workstation because users are on them "constantly." Even when the librarians come in before or after library hours to learn the Internet, they then cannot access the workstation during regular operating hours because usually someone is at the terminal. There was some discussion about the project's requirement that the workstation be a public access terminal rather than for the librarians.

Success Stories

All of these librarians had success stories concerning finding resources or information that otherwise could "never have been obtained at the library." One librarian was overwhelmed with the "neat stuff" available from the federal government and noted that some of the statistical sources she had been using were "fantastic." They also told of success stories from the users that ranged from one woman finding information about home gardening and plants to another that obtained agricultural information that helped him manage his farm. One librarian noted that they were almost always able to find material and print it for patrons that otherwise could not have been obtained except via interlibrary loan. Users were often "amazed" at what they could find.

Publicity

The librarians had very different views about the need for and importance of publicity for the public access Internet workstations. One that had done some publicity noted that it did result in new people coming to the library, but that it also resulted in waiting lines and having to develop a sign-up sheet for when people could use the terminal. Another commented that she had "plenty of use and additional publicity was not needed" and any publicity may result in "too many people wanting to use the workstation."

Benefits and Impacts

When the investigators asked the librarians to list what they thought were the most important benefits and impacts from the project, a flurry of responses resulted that included the following:

- Visibility and credibility. In these communities, users now saw the library as "at the cutting edge of using technology." In addition, the library is "the first place to try" to obtain information "because we have computers."

- Reduced intellectual isolation. People in the community now had "the same access to information and resources as people in the cities."

- Introduced computers to people. For a number of users in these libraries, this was their first exposure to a computer and learning how to use one. The users have been "empowered" to access information that they otherwise could not obtain.

- Expanded and "cost free" collections. The librarians were overwhelmed with the range, quantity, and quality of reference sources that they (and users) now accessed. "My collection is now the entire world -- and it costs me nothing," one librarian commented.

- Use of e-mail. The ability of these librarians to now use e-mail to contact their district library and other libraries and individuals is very important to them. Because they cannot afford long distance calls, they can now "talk to anyone in the world."

- Reduced Inter-library loans. These librarians believe that they are requesting fewer interlibrary loans. Users come in and "usually they can find *something* on the net that meets their need -- and it is full-text."

- Collaboration with schools. Two of the librarians noted that they were collaborating with the local schools with training and use of the workstations.

- Leveraged donations and fundraising. As with the view of the director of the site library, the appearance of the computers seems somehow to have helped them in various types of fundraising efforts. One person commented that "new services seems to help fundraising -- especially if the services help children." Another received a $25,000 donation that came, the librarian believes, at least in part, because of the new computer presence at the library.

- Jump-started the library and the librarians. These workstations quickly moved the libraries into the computer age and did it in a relatively short time. The project also got the librarians to become computer literate and for these librarians, "I am very interested now in using the computer in the library."

In short, there were numerous impacts and benefits that have resulted from participation in the project. Some commented that there may be more benefits yet to be realized since they had only provided Internet access for 4-5 months.

Too Successful and Raising Unrealistic Expectations?

To some degree, there was a sense that the OnLine PA project had been "too successful" in that the libraries had significant amounts of users and work that had not been there prior to the project -- and she noted "no additional staff or resources for that workload." One librarian commented that the success was wonderful, but she needed "more staff and resources to keep up" with the demands placed on the library. The project had raised community expectations for library services and use of computing. The reality, however, was that no additional resources from local governments would be forthcoming and they wondered how they would "cope" with this success in the future.

Recommendations

There were two sets of recommendations. The first set of recommendations dealt with the OnLine at PA Libraries project directly:

- The reference training (second session) needed to be done earlier in the project. More "hands-on" training would have been good. Possibly the district libraries could be more involved in training and project support.

- Not providing the libraries with the password to disable Fortress was unfortunate and just made it more difficult for the libraries to finally get the computers configured correctly.

- Treat librarians in participating libraries as partners in the project, not "problem children." While it was clear that not all library staff and directors were technology literate, most consider themselves quick studies. To not include the librarians in the decisions of computer configurations (e.g., what speed the modems were set to and the resolution of the video) seemed inappropriate.

- A district electronic discussion list or perhaps a list for all the participating libraries in this project to share information about what they have learned and successes would be very useful.

- Clarifying the "next steps" for the libraries now that they are connected and providing public access Internet service. "What are we supposed to do now?"

Another set of recommendations dealt with suggestions for "Phase II" of the project:

- Provide each district library with a projector that could be loaned throughout the district so that the librarians could demo what the Internet connectivity was "all about" for groups in the community.

- Hold more training sessions and better share information in the district about successes and how to best use the new workstation.

- Provide each library with a second workstation that could be used primarily by the librarians for reference services.

- Develop an on-going collaboration with Bell Atlantic or other organization to support projects such as this.

- Learn more about IT planning and how to integrate the computers into the library better.

These librarians felt strongly about the need for some continuation of the project and to have a "Phase II."

Conclusion

Clearly the librarians thought the project was very successful. The average response on their questionnaires regarding the success of the project was 4.2 (1 = not successful, 5 = very successful). They were concerned, however, that this "quick fix" could not be carried through into the future. To some degree this project whetted the librarians' appetites for more computing and Internet resources. But they believed that they would not get additional resources from local governments given the economic climate in their communities. They saw this project as a very important State Library initiative and hoped the State Library would continue the initiative as it was their "only hope" for staying abreast with new technology and applications.

User Focus Group

Six individuals participated in the user focus group. The library director also was present. The group included a:

- Male pastor and writer, 43 years old

- Male manager of a used bookstore, 51 years old
- Female free lance writer, 39 years old
- Male college student, 24 years old
- Male former restaurant manager, 55 years old; and
- Female management consultant, 44 years old.

Five had college or graduate education and one had a community college degree. None considered themselves as "new users" to the library. Four saw themselves as "beginners" and two as "intermediate users" in terms of their Internet skills. For five of the six, their first ever access to the Internet came through the OnLine at PA Libraries project.

Awareness of the Internet Access

All of these users heard about the Internet connection as a result of coming to the library. They saw the workstation and were interested in using it, talked to the director about it, and received basic instruction from him. Then, as one person put it, "I was off and running." They had not received much assistance from library staff and "learned by doing."

Use of the Internet

All of the participants were "amazed" and "impressed" with the information resources available over the net and more specifically on the Web. Each had one or more success stories of how they found information that they otherwise would not have been able to obtain. Topics that were of interest to them for which they had used the Internet were employment opportunities, information on companies, financial investments, music, hobbies, and the Civil War. One told of getting the name and address of an organization in a foreign country; another about pictures of paintings in a particular museum; and yet another about historic needlework with pictures of that needlework.

They noted that the general use of the public access workstation seems to be increasing. Two agreed that they now phone ahead to make a reservation to use the workstation because they do not want to wait when they arrive at the library. There was a general consensus that once the kids knew about the Internet from the schools it would be very difficult to gain access to the workstation. They asked the director when a second public access terminal would be available.

Access for Economic Development

Three and possibly four of the respondents used the Internet as an entrepreneur. One person commented that she uses various websites to "check-out opportunities for freelance writing." She noted that a number of sites on the Web had given her ideas or direct opportunities for selling some of her articles. This person referred to the public access workstation as her "lifeline" to the world. Another was trying to start up a virtual bookstore on the Web. Another talked about the possibility of selling crafts via the web. This discussion highlighted the view that users could use the web to compete in a global marketplace, "bring commerce" to the county, and that they were using the library's Internet connection to support local economic development.

Additional Resources for the Library's Internet Connection

The users were a bit disparaging about the likelihood that the Internet connection would result in more local government support for the library. One person stated that in his view, "anything new was good for the county," was *not* the view held by most everyone in the county -- especially local government. They stressed that this was a very conservative county, that no one would be willing to support tax increases for anything -- least of all the library, and that most people would likely see the Internet connection as a "frill." They asked the library director how the public access terminal would be maintained *after* the end of the project.

Conclusion and Recommendations

This group of users were avid supporters of the library and the public access Internet connection. They believed that such innovations at the library were critical if the county was to move forward toward the 21st century successfully. Indeed, they thought this particular county could really profit by the public access terminal because it was so poor, rural, and isolated. They also noted that their views probably were not the views of most people in the county.

One person commented that use of the Internet via the public library was especially important because many people in the county could not even have TV reception unless they paid for cable -- due to the isolation of the county. Thus, her view was that in such a situation, having a free Internet connection via the public library was absolutely essential. Without it, some county residents might "never learn about the bigger world out there." She felt the county was very provincial and the public access Internet connection would reduce that provincialism.

This group of users did not want to lose the public access to the Internet and were concerned about how the service would be maintained and expanded in the future. They saw a need for a second public access terminal now; they liked the idea of having more training sessions and thought maybe a local "expert" might volunteer to do this;

and they thought additional guides, magazines, or handouts about information on the Web would also be useful.

LIBRARY B

This library has a total operating budget of $95,000, of which $1,100 is budgeted for books and $2,500 for serials. It is attractive but small (5,400 square foot), relatively new (built in 1974) and located in a municipal complex. There are three full time staff at 35 hours per week and two part time staff at 15 hours per week. The library director and staff are considerably underpaid -- especially the library director who has a MLS. The library is open 50 hours per week. Participants described the local area as economically "stagnant." The school district is the major employer in town and agriculture comprises much of the local workforce and the population is an "aging one."

Interview with Director

The director was very pleased to have received the grant for participating in the OnLine PA project -- oftentimes it is difficult to compete against the bigger libraries for grants and resources. She noted that all information technology (IT) at the library had come from grants or gifts of one kind or another as there was no budget for IT available. Her district librarian has been "superb" in helping the library with getting them this grant. The director was very aware that the library was "well behind" in IT use and she saw this grant as a way to "get up-to-date."

Workstation and Connectivity

The workstation is in a prominent location very close to the main reference/circulation desk. They had no difficulties in setting up the computer. During January 1997 it was used by staff for training and in early February the workstation was made available to the public. A local Internet Service Provider donates the connection and provides unlimited use. The library does pay for the additional telephone line.

Training

Staff had very limited knowledge of the Internet, the PC workstation, and telecommunications. The first training session the director attended, sponsored by the project, had content that oftentimes was "over her head" with unclear terminology. Terms like "dot com" meant nothing to many of the participants. They needed basics on how to use the computer *before* learning how to use Internet applications. It probably would have been more helpful if staff could have been trained at this time. The second training workshop was much better and more helpful but probably should have been scheduled earlier since it dealt with reference resources.

Staff provide users with basic information only on using the workstation. Only one member of the staff is really "into using the workstation and the Internet." This person has trained other staff and also helps the director. She also has set up special bookmarks for "important or key" websites. There have been discussions at board meetings to have a training session for the public. They are considering a weekend and evening session to get all types of users. They are also trying to get community volunteers to help with community training. The director believes that they have some users who would be very good as trainers.

The director noted the importance of ongoing training for both staff and users but also noted the lack of time, difficulty in motivating staff -- especially the elderly staff-- to participate in training. What they need most is the time to simply sit at the terminal with someone who really knows what they are doing and get "one-on-one training and help." She concluded that "there never will be enough training" done or available.

Users

There are clear generational issues with computer use: both staff and patrons. Many do not see the value to computer use just yet -- both software applications and Internet. In addition, lifestyle factors seem to affect who uses the Internet workstation. Professionals, younger folks, and kids that have access in school seem to be "typical" users. A number of the users came to the library and needed little help in using the workstation. There appears to be a number of repeat users and a set of core or regular users of the Internet workstation.

Policies and Procedures for Use

There is a sign-up sheet for users to access the Internet workstation. Users have a 30 minute time period to use the workstation. If no one is in line or has signed up, then they can stay on longer. There is a written consent form that children under 18 have to sign with their parents (while parents are present) if they are to use the terminal. As of early June the library had 47 such signed forms on-hand. A sign on the workstation states "No Chat Rooms." They have encountered only one "problem patron" in the use of the workstation -- having to do with chatrooms. There have been no problems with pornography. The director believes that having the workstation so close to the main desk and "watchful librarians" helps to minimize any such problems.

Increased Visibility and Credibility

The library is an unknown resource in general. The OnLine at PA Libraries project seems to have increased credibility/value of the library. She believes that there is increased community awareness of the library as a result of the project. There has been some press coverage (one article in the local newspaper earlier and one currently being written by the director). The director also noted that increased

community awareness and visibility take time. While use of the Internet workstation is increasing, the full potential of the terminal still may not be realized by the time the project ends.

Role of the Board

The library board is a governing board that reports to city council. The library board has had some interest but has not been particularly active in the project. The board, like the community, is not technologically savvy. The board has a good relationship with the school district which might help in working with the schools in the future regarding the Internet project. While the board is supportive about the terminal and Internet access, they have not made an effort to come in and learn it.

Too Much to Do

The director pointed out that learning to use the Internet workstation, helping users, integrating the Internet access into other library services is *in addition* to everything else that they are trying to do. Other responsibilities did not "go away" with the arrival of the workstation and Internet access. Indeed, as she noted, were it not for dedicated staff (underpaid staff at that) they could not get done what they do. So, the arrival of the Internet workstation needs to be seen in the context of all the other responsibilities they are trying to complete -- with inadequate staff, time, and budget.

Conclusion

The director stated that having the equipment or getting the equipment is always an issue. But the real issue is knowing how to use it. She recognizes that she and the staff really do not know how to take advantage of the new computing technology. They need, in her opinion, a champion/super user to really cull the resources on the net, set up bookmarks, and help the library staff better use the Internet connection.

The State Library did an excellent job in starting this project. Bell Atlantic also should be congratulated for funding the project. If it were not for this project the library would not have an Internet connection nor would they likely have one in the near future. Although there were problems with mechanics (training, use, time, etc.) this project was well worth the effort. The director stated that follow-up projects that build on the success of this project will be needed, however, if the library "is to continue to use computers and new technology."

Group Interview with Staff

Four staff members participated in this interview session. One was full-time during the day, the other three were part-time and worked primarily in the late afternoons or evenings. Two of these staff are paid by a federal program, otherwise the library could not afford to hire them. All worked in the library prior to the OnLine at PA Libraries project. They had very mixed perceptions and expectations about the project: some were frightened and did not want to learn it; others found it a welcome tool. One staff member clearly was a "champion" for the Internet connection and workstation -- others deferred to her views and comments.

Barriers

For a number of the staff, simply using a computer and a mouse was a big first step. One participant stated, "look, we're old and set in our ways, it's very hard to change and use these computers." They all noted that they were "overloaded" with work and things that needed to be done. The Internet workstation, although it might be neat, also is simply more work. One person indicated that this whole "Internet stuff" was beyond her!

Success Stories

The one staff member, especially, is discovering Internet access as an important tool. She told of an instance where a class needed information on the environment and everything in the library was already checked out. She used the Internet to a number of Web sites and was "amazed" at all the information available and in full text. The students would never have had access to this information had it not been for the Internet connection. She noted that the connection really expands access to resources and tools; she would not be able to help some patrons without it.

Training

The one staff member really took to the Internet access. She is now getting a connection at home as well. This person and one other (not present at the interview) provide training to others on the staff. The other staff and the director generally rely on these two staff members to answer questions about both Internet and equipment. They estimate that they have provided staff with approximately 20 hours of training -- most of which they have learned on their own.

In terms of training users, most users already have some skills. The library policy is such that users do not receive much training due to lack of time. However, during the day they do answer some basic questions for those that are not familiar. In such instances they may spend 5-10 minutes and users are generally off and running. Once connected, many users easily figure out how to use the Web. In fact, the staff oftentimes learned from the users.

Users and Use of the Workstation

The staff reported that users are very positive about the Internet and are amazed at how far they can go with obtaining Internet resources. There are many repeat users. They characterized the users as young students and young men and some women. Users especially liked printing capabilities so they can immediately obtain copies of important information. One stated that the "range of resources I can access on the Internet is very impressive." One staff member has gone out and found "important reference resources" and has bookmarked many. She does not really use the Mansfield Library homepage but has her collection of favorites.

When asked for examples of topics they have found to be especially good for patrons, a flood of responses came, including:

- Financial information;
- Sports;
- Recreational;
- Genealogy;
- Employment (very high use in this area); and
- E-mail (out only).

They thought the workstation was generally in use most all the time. There had been no problems thus far with pornography, vandalism, etc.

On the other hand some users think they can do more than they actually can and had unrealistic expectations. Some have the view that "one button for everything" and were disappointed when it took more effort. Patrons want more terminals and faster access -- the 28.8 baud modem just is too slow. The schools are just starting to have Internet and to teach it.

The schools accept Internet-based resources as sources for papers. Students are starting to expect the library to have the Internet sources since some have this in school. Staff expect significantly increased student use in the future once the schools are more online.

Visibility

Generally, the library relies on word of mouth to publicize the Internet access. Notices, etc., would come from the board and director -- the staff is really not involved in this and, as a result, they did not know of any publicity to date. They found that word of mouth is helping to bring new users/patrons because of the OnLine at PA Libraries workstation.

Conclusion

The staff, and especially the one individual who was "into" the Internet believed that the OnLine at PA Libraries project was an exceptionally good project and, despite extra work, thought it was a very good thing for their community. In terms of specific impacts on the library, they thought Internet access had the potential to reduce ILL since a number of items found in full text would not have been available in the library. In addition, they believed that Internet use may be increasing circulation since people would find information on topics and want additional sources that they could take home with them. They had the following recommendations for future activities:

- Increase the number of computer workstations -- it was becoming increasingly difficult for the staff to have access to the workstation for reference uses.
- Obtain faster modems or obtain better connectivity through leased lines.
- Provide more in-house, hands-on training; the District Library should be more involved in training; they could provide in-house "roving" trainers.
- Improve the ISP connection -- it oftentimes "times out" and the next patron may not know how to re-connect.
- Provide more time for staff to be trained and use the Internet.

One staff member said that she was really pleased that Bell Atlantic funded this project -- that patrons did notice Bell Atlantic sponsorship (through signs on the terminal, the OnLine PA mousepad, and explanations). They liked the State Library for doing this (but did not know that the State Library organized it!); everyone was a winner on this project.

Luncheon Focus Group with Neighbor Librarians

The luncheon focus group session contained nine librarians and one student intern from near-by libraries including the librarian from the site library. One participant was from the District Library and another was a staff member, all others were directors. One participant had not been involved in the project as yet but had an application in for "round two" participation. These individuals represented libraries with budgets from $20,000 to $130,000 per year. The focus group session lasted approximately an hour and a half and was extremely lively.

Overall Perceptions of Project

Generally, everyone had very positive views of the project, its operation and administration, and the impacts on their libraries and the community. The telephone charges they paid for connectivity were in the range of $15-$29 per month and this

really was the only ongoing expense they had to cover. Except for one who had previously had text access, they strongly agreed that "if it had not been for this grant we would not now have Internet access." One library had text only access to the Internet prior to the project, and the grant provided a significant upgrade in the quality of the access provided.

Leveraging the Grant for Local IT Support

The participants were very clear that while there were numerous benefits and impacts from these grants, they did not result in obtaining additional resources for IT and computing from local government for their library. "The reality is that there is no extra money in my local government and they think that too much already goes to the library." Local government officials were "pleased" that the library got the grant -- if they knew at all -- but saw it as an "extra" for the library.

The participants agreed that the only way they would be able to upgrade this technology or build upon it would be with future grants or other types of assistance from the state. Thus, the model that providing rural public libraries with Internet connection would "hook" local governments to provide additional support for the library in general or IT in particular simply is not accurate. Other benefits and leveraging of the connection did take place (see below), but not in terms of obtaining additional local support (as yet).

Uses and Users

Participants saw the Internet connection as supplementing and enhancing their resources and also recognized that the access provided them with resources that otherwise they could never hope to acquire and use. Many had specific stories or anecdotes about locating resources on the Internet that were "astounding," "fabulous," or "unbelievable." Specific topics of useful resources included:

- Government documents;
- Medical and health information;
- History (anecdote about person interested in the Civil War);
- Job opportunities; and
- Genealogy.

The nature and types of users seemed to vary somewhat from library to library. There were divergent views as to whether the Internet connection was used most by "repeat users" versus new users; but all agreed that new users had been attracted to the library because of the Internet connection. Most agreed that the younger, more professional, and kids who knew about the Internet from school were "typical" users."

All had printers available at the rate of 5¢ - 25¢ per page and patrons took advantage of printing information they found on the Web.

Role of Library Boards

Here too there were very different views about the interest and role of the boards in the project and in Internet use and access. The reality is that many of the board members were elderly and simply did not understand the new technology and why it was needed in the library. Although they may not have been anxiously supporting the Internet access they generally "went along" and thought it was OK -- especially since it did not cost them any money. The participants doubted if the board members could be proponents for additional library IT projects since they understood little about it. Most participants agreed that only a very few of the board members had come in to use the Internet workstation or see (ask for) a demonstration.

Problems and Issues

The participants identified a number of problems and issues related to the project that might require additional attention and thought:

- Original default settings on the workstation and modem. A number of the participants commented that the workstation arrived with settings that they wanted to change or improve (i.e., baud setting on the modem, system configurations, colors available on the monitor etc.) and were told that they could not be changed by the IU. Most were quite passionate about not being able to obtain the "password" to disable the software program Fortress.

- State Library's support for rural public libraries. The group agreed that the State Librarian really went "out of his way" to help rural public libraries with this project and it was really welcome since some thought the larger urban libraries tend to get more attention. This project "really made the State Library look good" and participants hope others will come along as well.

- Role of IU 29 in the project. There were some comments (not by all) regarding the amount of money that went to the IU to administer the project, provide support, training, etc. Also many felt that the administrative structure of the project was somewhat rigid and did not allow flexibility at the local level.

- Training and support. The only "real" training was at the second training session where they learned "what to do" with the Internet connection. Information and advice from the IU oftentimes did not help them much. One person commented (with others nodding agreement) that they just quit calling with questions and found someone locally to help them. In addition, provision of some small amount of resources for each library, like $500 each, for software, other applications, and to help in travel to the training would have been very helpful.

- Budgeting and Planning for IT. They need assistance either from the state or their district library center on how to budget and plan for future IT, computing, and telecommunications costs. In addition, they need to know "what next?" in terms of how to integrate the Internet access into overall library services and resources. One person commented, "it's great that we have this [Internet workstation] but now what do we do after we learn to use it?"

- State aid formula. There was some discussion about the complexity of the state aid formula and how rural public libraries "competed" effectively with other libraries in the state. Some thought it would be good if the formula allowed some additional support for the rural public libraries to better support IT and upgrade their workstation. A number of participants saw "no way" that they could find resources to upgrade their workstation from the grant in the future.

Participants identified these issues and problems in a positive and constructive manner as a means for them to continue IT development in their library and to maintain the momentum from the grant.

Benefits and Impacts

When participants considered the range of benefits and impacts that had, or were likely to result from the project, they identified the following:

- Improved communication via e-mail with other librarians, the District Library and others.

- Access to an "astounding" number of additional resources that they did not have access to at their library.

- Access to those additional resources that were very current and up-to-date as compared to many of the print sources they currently owned.

- Access to those additional resources was full text and very often free.

- Increased visibility of the library in the community -- for some, the library had the only public access Internet connection in the entire community and increasingly, folks were becoming aware of this.

- Increased credibility of the library due to the appearance and use of the Internet workstation made the library seem more up-to-date.

- Productivity of library staff in areas of reference and referral and perhaps later in collection development may increase.

- Saving the cost of some expenditures for resources since they did not update or replace print sources if they knew they were easily available on the Internet.

- ILL costs may be decreasing since users can oftentimes get full text of whatever they want *right then*, and not want to wait for an ILL later.

- With purchase of additional CD Rom reference products instead of print sources could possibly save money.

- The presence of the Internet workstations in the libraries leveraged the ability of the District Library to write and obtain grants; she reviewed the list of grants issued in the last year and estimated that some 12 grants (that resulted in approximately $35,740) resulted or were significantly strengthened because of the Internet workstations throughout the District.

- The OnLine at PA Libraries project "jumpstarted" many of these libraries into the Internet world of information resources which would not have occurred otherwise; librarians are now becoming computer literate and are leading their communities in the use of computers and the Internet.

- One librarian noted that they hired a 20 hr/wk staffperson to operate the Internet workstation as a result of the grant (others were very jealous!).

An interesting theme throughout the discussion of benefits and impacts was the oft-stated view that it may be too early to identify all the possible benefits and impacts from the project. Participants noted that some libraries have only had public access Internet available since February (note that others had it available since November). But they were very positive that we are only "just beginning" to see the various impacts and benefits from the project. They suspected that a year from now, more benefits and impacts than those listed above would result.

Conclusion

Participants noted that the State Library computed the value of the workstation they received at $2,500. The investigators pointed out that if they had had to buy that same configuration without the large scale purchase done by the state, the price would have been considerably more. Nonetheless, they noted that for that investment, they thought they had provided significant time, effort, travel, training, etc. Thus, the $2,500 investment resulted in considerable return on investment for the state, Bell Atlantic, and their local community.

These librarians were especially interested in "next steps" with this project. One asked: "what is the plan in the future for computing development at my library? does the State Library have another grant program planned? will the district library center be more involved in assisting us in IT planning?" For some participants, there was a sense of "now what?" and what was "Phase II" going to be!

Users Focus Group

The focus group session was, in itself, a dynamic and evolving situation. At the outset, five individuals arrived to participate in the session who had been contacted earlier. However, a number of Internet users were present in the library at the time of the focus group and were "ushered" into the session by library staff. In addition, half way through the session a man passing through the city used the Internet workstation and joined the session. In addition, some of the teenagers that joined the session after about 10 minutes into the session left after another 10-15 minutes. The session lasted about an hour.

Overall, there were 8 participants who were fully engaged in the focus group for the majority of time the session was held. This included five adults and three teenagers. Adults included a teacher, a teacher's aid, someone in automotive sales, and an inventory analyst. The adults were between 30-50 in age. The adults characterized themselves as beginners, used the Internet connection 1-8 times during the past month, and had no formal training in the use of the Internet or the workstation. They ranged from having received high school education to graduate education. The teenagers reported using the connection between 10-15 times in the last month and saw themselves as "intermediate" users. They also had received no formal training.

Users and Uses

The participants reported a variety of uses of the Internet. They use it for a range of reasons: doing homework, book reports and games for the teenagers; recreational uses such as tourism for adults; checking on competition for business purposes (inventory and sales of car parts); CNN and other news sources; job information and employment; and genealogy -- to name a few. The participants thought that there was a generation gap of who used the Internet workstation -- younger people more likely to use it.

One teenager commented that it was "faster and easier to get information off the Internet than it was to find it in the library." He did not use print sources much anymore. A woman said that she notes the URL from television advertisements and finds out sites that way. A parent of one of the teenagers commented that she simply could not believe the amount of information available and was "amazed." In addition, she relied on her son to help her find "stuff" when she needed it. Another teenager commented that "my Mom has to pull me away [from the terminal] when we have to leave." Each had some success stories about finding information on the Internet that they otherwise believe they would never have found.

Pornography

The focus group participants indicated that they had not been aware of any problems with users trying to obtain pornographic information or using the

connection for inappropriate uses. A teenager said that with the terminal so close to the librarian's desk and closely monitored by the librarians, it would difficult to "get away with watching pornography anyway." There was also the sense from the teenagers that they knew they had signed an agreement to not access pornographic material and knew that the consequences of being denied use of the connection were significant.

Connectivity Issues

Four of the participants had connections to the Internet at home. One stated that she came to the library to use the Internet because the phone line at home "was always tied up." One stated that she had very poor phone service where she lived and could not use a modem because she had to tell the operator her ID number in order to get a connection. This person indicated that she would pay for being able to use the Internet since she could not access it from home.

Training

None of the participants had any formal training in how to use the Internet or the workstation except, some noted, some introductory information from the librarians. One teenager proudly stated that he knew "a lot more" about the Internet than the librarians did and that he often helped them find information. One of the adults said that she relied on her son for help, another learned by "trial and error," and still another said he "learned by doing it." The local schools either are just starting or do not provide access to students.

One of the participants was a member of the library board and asked the teenager who was very good at the Internet if he would be willing to help in giving training sessions to the public if such could be organized. He indicated that he would and there seemed to be some impetus to develop training sessions for the public offered by the library and volunteers in the future.

Recommendations/Conclusions

They thought that additional terminals were needed both for the public and for the librarians. This would be especially true now that Summer has come and school is out. In addition, as the schools begin providing Internet access and training, that will drive additional use by students. A potential "invasion" by students seemed to concern one of the adults as to her ability to access the Internet at the library. They thought that the cost of paper was not problematic (after 3 pages, 5¢ per page). One teenager noted that the speed of connection could be bad and wanted to know if the library could obtain a faster connection.

This group of users was especially interesting in that it included a very wide range of individuals including a number of teenagers. One teenager, age 15, was especially knowledgeable and interested in the Internet access from the library. He seemed to

have been responsible for training other teenagers and helping library staff as well. Overall, however, the users were just getting started with the Internet. They believed that the Internet connectivity was a "great thing" for the library, they are "amazed" at the sources that can be found and obtained, and have told others in the community about the new service.

LIBRARY C

The library's budget is $236,000 with approximately $58,000 for materials. There is the main library as well as two branches. The library is located in a county with a population of 32,000 and with a very high growth rate. The growth rate is attributed to families moving to the county from New York and New Jersey to "avoid taxes and live in a more rural setting." The facility is an old historic landmark building in the town with very small cut-up rooms and cramped quarters with only 2,100 usable square feet. There are nine staff of which three are full-time. The director reports to three county commissioners and a board that is advisory in nature. Despite the growth in population, some thought the area was economically depressed with the school district being the largest employer.

Interview with Director

The director is relatively new to this position although she has worked in Pennsylvania libraries a number of years. She was very supportive of the Online at PA Libraries project from the beginning, believing that public access Internet services would be especially good and useful in this county. They received the workstations and equipment and connected to the Internet in November, 1996. She participated in both training sessions provided by the IU, thinks the project has been extremely successful, and is appreciative to the State Library and Bell Atlantic for supporting the project.

Context of the County

The county is experiencing rapid growth without much economic development. There are two key groups of individuals in the county. The first group might best be referred to as the natives -- folks who have lived in the county most of their lives. They may own large amounts of land, some of which is being developed for resorts or vacation homes. The second group are recent arrivals who are fleeing high taxes from New York or New Jersey and are willing to do an hour and a half commute (each way) to the NYC-NJ area from the county. They may also have second homes in the county but live in NYC-NJ area. Thus, both groups do not want tax increases and are very conservative about how money is spent and for what in the county. The growth, however, has an effect on the county infrastructure and need for services.

Connectivity

The library pays $40 per month for the phone line. After some initial problems with the ISP, a new one has been very good and provided reliable service. The ISP donates the service to the library and also has provided some assistance on general maintenance of the connection and the computer. One of the employees of the ISP was a heavy library Internet user who until recently knew nothing about the Internet and learned about the Internet from the library (see users section below). As an employee now at the local ISP he helps the library out from time to time with a range of assistance.

The library has a second Internet connection on a 14.4 dial-up on a 486 workstation not available to the public. This workstation is "the workhorse" for administrative and other office support. There also is an automated circulation and catalog system which is networked with five terminals.

Support from County Commissioners

She noted that the county commissioners, while supportive of the OnLine at PA Libraries project, were not actively involved in it -- although one has come by the library to "try it out." Thus far, the project has not directly resulted in additional funds or support for the library from local government. While she is certain that the commissioners are pleased about the library's participation in the project, the message of "get *more* grants" is likely to be the response from participating in the project rather than let us give you more money for IT at the library.

Training

The director attended both the IU training sessions and thought that both were excellent and very helpful. Upon return from the first, she provided a training session for her staff and sat with each providing a hands on, one-on-one session as to how to use the new workstation. She estimated that about half the staff had "taken to" the workstation and using the Internet. She noted that she did not think "forcing" staff to use the workstation was the best approach, but instead facilitated and supported their learning efforts. There was one staffmember who really has gotten involved in the Internet and that person has helped the director mount training sessions for the public.

Once a month the director and a staffmember provide a training session for the public. These have been well-attended. The director tells those who attend the training session that she expects each attendee to provide at least 2 hours of volunteer help to others in the library on how to use the workstation and the Internet. She believes that this approach has been very successful. Most of the attendees at the training have given back more than two hours of volunteer help to the library.

Importance of Volunteers

The director plainly stated that "without the involvement of the volunteers, we never could have been as successful with the OnLine PA project." She could not provide enough praise for the volunteers and their help with training, working with users, and being involved in the project. In a session with two of these volunteers (see below) their interest and involvement in the project was obvious. A number of the volunteers regularly provide 10-12 hours per week assisting the library, many others provide 2-3 hours per week.

The director made a very interesting point that a number of these volunteers volunteered less to help the library and more because they were interested in the Internet, computing, etc. Thus, to some degree the training program for the public and the resulting volunteers produced new users for the library -- users based primarily on their interest in the Internet. Many of these volunteers had sophisticated knowledge and interest in the Internet. The director commented that "these volunteers have saved us both with training and in some maintenance of our workstation and connection."

Pornography and Use Policy

The library currently has a use policy which they ask *everyone* to read and sign prior to their use of the public access Internet workstation. This policy statement covers a range of topics and makes the policy for use of the workstation quite clear. Users under 16 have to have their parents sign the policy; those 14 and 15 may be exempted from the parent being with the child while using the Internet -- otherwise, the adult is expected to be present while the child uses the Internet.

Although the workstation is a bit hidden from the main desk, there have not been any incidents regarding pornography or inappropriate use of the Internet connection. The workstation, however, is very public and it is easy to see the screen as one passes by the area. The director reported that adults had not complained about having to sign the policy statement prior to using the Internet connection.

Marketing

The director provided the study team with a number of stories that appeared in the local paper, announcements, etc. related to the Internet connection. These had occurred about the new service, about training, need for volunteers, etc. The director had some concern about doing much more marketing as the terminal use had rapidly increased. There were many people using the connection, in fact, it was becoming increasingly difficult to use it without making a reservation in advance.

Work Load

The director noted that the workstation and Internet connection came with no additional staff to help operate them. Thus, she had successfully ("Thank God") been able to rely on volunteers for assistance. But the reality is that overall the project resulted in an increased work load for the library and primarily for her. She was not complaining or whining about this -- just stating it as a fact. She also noted that she is paid for 35 hours of work per week and typically provides 50 hours and sometimes more like 55. She is concerned how the library will transition successfully into this new information and computer age without additional staff and staff who have computing and networking skills.

Benefits

Without a doubt, the director stated, the arrival of the workstation and Internet connectivity has been a major boon for the library and its community. The library has received significantly increased visibility in the county and new users have come to the library "specifically to use the Internet." She also was convinced that the connection gave the library a sense of being "with it" in terms of having current technology -- thus, adding to the library's credibility as "key player" in the information age. She thinks that this new image of the library has helped it obtain some additional donations and gifts.

She also pointed out that for a small library such as hers, the access to an unbelievable amount of information and reference resources was phenomenal. She related numerous success stories of finding information or assisting users with the Internet connection that never could have occurred were it not for the Internet connection and workstation.

Issues and Recommendations

The director would like to have another terminal that is primarily for staff use since it is very difficult for staff to use the public access terminal for training and reference use -- given its heavy use by the public. Indeed, the main desk is in a different room from where they had to place the OnLine PA workstation. Although it is clearly a project objective to provide "public access" to the workstation, she wants to be better able to use the Internet for reference assistance.

This library would not have been able to purchase a workstation and provide Internet connectivity without the grant from the OnLine at PA Libraries project. Nonetheless, the library has raised some expectations for library services in the county that the library may not be able to meet in the future. It is unclear how the equipment can be upgraded in the future or how additional information technology can be obtained at all for the library. The bottom line, however, is "it is a very good thing that the State Library and Bell Atlantic were able to do this grant."

Meeting with Volunteers

Originally, this meeting was to include two staff members and two volunteers who have been actively involved with the OnLine at PA Libraries project. The two staff members, however, were unable to attend the session. Thus, the interview occurred with the two volunteers and in the presence of the director. Both volunteers were retired, one a man, and one a woman. Both had professional level experience in previous work, and both were extremely active and interested in the Internet connection at the library.

Types of Users and Uses

Both volunteers agreed that it was very difficult to describe the "typical" user of the public access Internet connection. One commented that he was surprised at the number of elderly users at the workstation. The other commented that the users "come from all walks of life."

Each had a number of success stories about helping people find information that could not have been obtained except via the Internet "and certainly would not have been available here at the library." The types of topics they mentioned that were heavily used included:

- Financial information;
- Health and medical information;
- Jobs and employment opportunities;
- Individual research questions;
- Government information;
- Genealogy; and
- Student papers/assignments.

Again, they noted that they were surprised by the range of topics and subjects that people used the Internet access to obtain.

Library Internet as Social Equalizer

One volunteer commented on how impressed she was that access to the Internet and being able to search it for information was "a great equalizer" among people in different classes of society. She pointed out that public access to the Internet gave "anyone who wanted it" access to the world of information -- regardless of race, social class, etc. This, she said was an important role for the library. The other volunteer agreed emphatically. They both thought that this role of the library was especially important given the make-up of residents in the county.

Being a Volunteer

Both were very pleased to have been serving as an Internet volunteer. Both had attended the public training provided by the director and one said he had been "hooked" to help out at the library. He estimated his weekly involvement with volunteering at the library to be about 12 hours per week. This particular volunteer was extremely knowledgeable about the Internet and very engaged in being a volunteer. He told of instances when he would see patrons "stumbling" to find the information they needed and directed them to the Internet connection, helping them to find what they wanted "almost immediately." One could see how his presence in the library would be a positive dynamic supporting the use of the connection.

They both felt that it was somewhat of an "honor" to be an Internet volunteer at the library. They both provided quite a bit of "word-of-mouth" advertising about the Internet connection. They had a great deal of praise for the director in supporting the project and the volunteer effort.

Benefits

The volunteers noted that there was no institution for higher education in their county and without the Internet connection at the public library one would have to travel some distance to an academic institution to be able to have such access. In fact, one reported that a user commented that with the Internet connection at the public library she could "escape from this county." Both thought that bringing in the global wealth of arts, information, history, etc. to *their* county was a significant improvement on the quality of life.

They also agreed with the director that the connection had significantly increased the visibility of the library. The library now had a "technological presence" in the county. They recognized that the range of information they could get, in full text, and "right now" was unbelievable and provided information that the library could never, otherwise, obtain.

Recommendations and Issues

The volunteers said that the library needed two more terminals and connections: one for the public and another for the reference staff. They also would participate in additional training efforts if available. As an example, one of the volunteers noted that if they had been told about how to download Adobe Acrobat sooner, they could have been presenting information in pdf format (actual print page presentation).

They would like to promote the service more, but as with the director, are concerned that the library may not be able to meet the additional demand resulting from such promotion. They both agreed that the library needs "much better" connectivity and that reliance on a 28.8 baud modem was "clearly inadequate." One

was especially interested to know what the "follow-on" project would be that would build on the success of this effort.

Luncheon Focus Group with Neighbor Librarians

Lunch included a total of nine librarians knowledgeable about the project including the director of the site library and two librarians from near-by district offices. Those managing libraries had budgets ranging from $101,000 - $360,000 with populations served ranging between 5,400 to 50,000. Of the nine responses by the participants regarding their assessment of the overall success of the project (1=very unsuccessful, 5=very successful), eight responded with a 5 and one responded with a 4. On average the participants have 11 years experience in their current library position. Most had experience with computers prior to the project. This was a group of very committed, dedicated, and involved librarians.

Users and Uses

As a group they estimated that 20-25% of the users to the Internet connection were new to the library and came because of the availability of the public access to the Internet. They all rely on a sign-up sheet to control use of the workstation, although some vary in amount of time for which users can sign-up. They found it hard to describe a "typical" user and pointed out that students, seniors, young professionals, and others were regular users of the workstation. Most said that the workstation was "occupied" most of the time the library was open.

Their users generally "could not believe" the range of resources and information that they could access via the Internet. Users were especially delighted to be able to print out full text of interesting articles and other sources. In two cases, local teachers assigned students to obtain sources for papers from the Internet connection at the library -- which also increased use. High use topics that the librarians saw users accessing regularly were:

- Financial information;
- Genealogy information;
- Real estate and relocation;
- Drug prevention information (especially among teenagers);
- Medical and health information;
- Political information/current affairs; and
- Foreign source information such as international newspapers.

They agreed that it was difficult to single out specific topics since the range of information obtained through the Internet was extensive.

Control over Workstation Access

In terms of keeping track of who the users were, one librarian told that at her library, first you had to be a registered borrower with a library card to use the workstation. Then, to use the workstation, the librarian would "swipe" the card through a circulation barcode indicating that the "Internet" was now checked out. The desk retained the library card until the individual was done using the workstation. She noted that this approach made it very clear who was using the workstation, how long, and contributed, she thought, to a lack of pranks or problems developing in the hardware and software. The approach also provides excellent record keeping of who was using the public access terminal since it was linked to their library card.

Gaining Additional Support for the Library

All the librarians agreed that having the workstation and the Internet connectivity while "very good and beneficial" would not pry loose additional resources for the library from local government. Each thought their local government was less likely than the others to provide additional financial support given local sentiments against any type of tax increases. Three of the participants noted that the workstations may have helped them in their local fund raising efforts or otherwise helped in obtaining some gifts and contributions.

Success Stories

Participants each had various success stories from users who accessed the Internet through their library. One told of a user who, when quickly finding "exactly" what it was she wanted, shouted "Ta Dah," as if this were the normal procedure. Another told of finding information about the effect of coffee on people with Lime Disease. Still another told of obtaining some government statistics related to economic development in another state that "I never could have gotten -- or even known about -- from the library." Finally, one told of how they had the Web sites bookmarked for Federal and three different state sites that provided tax forms -- "this really saved us a lot of time and effort." While there also were instances when patrons did not find what they wanted, it appears that there were many more instances of success.

Use of Volunteers

Some participants had developed a volunteer program to assist the library in training and use of the public access Internet service, others had not. There were divided opinions on the usefulness of such an approach. As stated earlier, the director at the site visit was very positive about her experience using volunteers. Other

librarians related experiences that were not as positive. The group generally agreed that it is hard to generalize about volunteer programs as they were very situation dependent, and dependent on the personality of the librarians and the volunteers.

Benefits

The librarians discussed a number of benefits that resulted from the Internet connection in their library, including:

- Expanded collections. Librarians reported being able to access resources that significantly expanded the size, quality, and extent of the collections that they had in the library.

- Savings by not purchasing materials. Librarians noted a number of government resources available via the Internet that they would no longer purchase; another noted that she would not renew her *Books in Print* since she was able to get most the information she needed from Amazon.com (web-based bookstore).

- Visibility, credibility, and respect. The librarians were especially pleased with the increased visibility and credibility that came to the library as a result of being in the technology "forefront" of their community. One person commented that it was more than just visibility and credibility -- "the library has increased respect in the community and is seen as a very important institution, more so than before the workstation."

- Community equalizer. The Internet connection makes it possible for *anyone* to have access to an expanse of information; it benefits everyone.

They also commented that a recent announcement from Microsoft that Bill Gates would provide $400 million in support to public libraries over the next five years has had a positive impact on the library's visibility in the community -- especially since these libraries already had some level of Internet access. Overall, they noted that the workstations provided their community with links to the rest of the world that simply would not have occurred without the grants.

Issues

While the introduction of the public access workstations clearly had numerous benefits, it also raised a number of issues that participants identified:

- Workload. The librarians agreed that overall, they now have more responsibilities and workload because of the workstations. They believed that there was nothing they could "stop doing" and that (except in one instance) they received no additional staff to help out on the grant.

- Workstation and telecommunication upgrades. They wondered how they would be able to obtain upgrades to the workstations they now had or otherwise obtain financial support for additional IT expenses related to the Internet.

- Raising unrealistic expectations. One person commented that the workstations and public access to the Internet had raised the community's expectations of what the library could and should be able to provide electronically. Additional service demands were being placed on the library for which they had no resources to meet. Others nodded in agreement.

- Access to the workstations by library staff. One public access terminal clearly is not enough in the library. If staff are to use the Internet effectively for reference services, a second terminal at the reference desk is needed.

- Technical support. They need to have someone available to help them with technical support, maintenance, etc. Most readily admit that they do not have the needed skills, nor can they afford to hire someone who would have the skills. Thus, they are dependent on volunteers or the goodwill of their ISP.

Recommendations

This group of librarians had a number of ideas and recommendations based on their experience with the project thus far:

- Financing public library information technology-based services. One individual noted that the public library community in Pennsylvania, as a group, and with the assistance of the state library, needed to rethink financing issues related to public libraries in general and IT more specifically. The group referenced a series of articles in a Philadelphia paper that discussed this concern ("Libraries in Distress," *Philadelphia Inquirer*, June 1 - June 4, 1997).

- Need for better connections. Everyone agreed that 28.8 baud modems were "the pits" and simply took too long to download information off the web. One person had a 56K line into the library and said that even that was inadequate. What we need, he said were T1 connections and "we need it now!"

- Ideas for the "next" project. There was no lack of ideas for what the State Library might do as a follow-up project. Some of the suggestions were:

  - *Technology maintenance circuit rider*. Have one person per district that had the responsibility of going out and helping member libraries with technology maintenance, repairs, and general troubleshooting.

  - *Loaner laptops and projectors*. Each district should have a loaner for a laptop and a projector so that the librarians could do demonstrations to appropriate organizations and groups.

- *Information Technology planning*. The librarians need assistance on how to develop an overall IT plan for their libraries, a better understanding of the library IT components and configurations that might be possible, and how to help finance the implementation of the plan.

- *Training*. They offered a number of topics that would be appropriate for training sessions in the area of Web-based reference services, building and maintaining a library homepage; how to train users; developing a library IT plan; and providing web based services (i.e., interlibrary loan requests from home).

- *Additional terminals*. Everyone agreed that a follow-up program that provided additional workstations with Internet connectivity would be a good idea. They agreed that minimally a library needed three workstations, two for the public and one dedicated for staff use.

- *Faster Printers*. The demand on the printers at the workstations is significant and it takes "forever" to print out long documents. "Can we have a program to upgrade and enhance the printers?"

- *Tutorials for users*. The development of basic or introductory tutorials either online or on video that all public libraries in the state could use to train users would be very helpful and save a significant amount of time for the librarians.

• Better sharing of project information. They thought that much could be learned in the sense of "best practices" from others who had participated in the project, but that there really was no mechanism in place to share such information, successes, ideas, and recommendations.

This group of librarians was eager to extend the initial project and hoped that some type of formal follow-up project would be developed and funded.

Interviews with Users

The interviewer had an opportunity to meet with two users of the public access workstation. A number of users had previously agreed to meet with the member of the study team during the afternoon but only one arrived for the meeting. Earlier in the day, during the meeting with the volunteers, a "heavy" user of the public access workstation stopped and chatted with the interviewer for about 15 minutes. These two interviews constitute the interviews with users at this site visit.

User No. 1

This user was a young man who had done construction work in the past but had been injured and could no longer work construction. He became very interested in the public access workstation once it arrived, participated in a training session, and spent

"many hours" learning to use the Internet and helping others in the library. This experience spurred his interest into telecommunications and computers and he taught himself related skills -- becoming quite proficient.

In the process of helping out as a volunteer at the library, he applied for a position at a local ISP and was hired; the library director wrote him a letter of recommendation. He commented to the interviewer that he had more than a job, "I have a career now" -- because of his introduction to the public access workstation at the library. He went from knowing nothing about the Internet to having a job with the local ISP between February to June, 1997 -- for which he thanks the library. He continues to assist the library with some technical support -- in fact, during the interview he provided some guidance to the director about a technical problem the library currently had.

He was very enthusiastic about the public access workstation at the library and pointed out that he was "a success story" as a result of the Bell Atlantic grant. When he first began to use the Internet access he was as much entranced with the range of sources and information that could be found as well as "how it all worked." He noted that the library needed additional workstations that one terminal was not enough; that it needed a better connection than the 28.8 baud modem; and that the presence of the Internet workstation was a "very positive thing" for the community.

User No. 2

This user was a retired woman who had attended a training session and described herself as "just getting to know my way around" on the Internet. She came to the library one day, saw a sign advertising the availability of the Internet service, and went to the training session. She thinks the service is "wonderful," and believes it should be expanded into the branch libraries (the branch closest to her does not as yet have Internet access). She lives in a rural part of the county, some distance away, and could not afford a computer herself. So, were it not for the public access terminal in the library, she would never be able to use the Internet.

When asked about her use of the public access workstation she replied with a broad range of topics:

- Information about the Council of Trent (found something immediately)
- Financial and stock quote information
- Gardening and "outdoor" information
- Personal research
- Civic information.

She talked about the importance of the Internet connection in conjunction with a local issue related to computers in the schools. She had been able to obtain

information from various web sites that informed her as to the need for and use of computers in schools which she intended to use when she participated in the discussion about the issue. She said it was "great" to be able to obtain additional views and information to bring to bear on this particular local issue.

While the service was great, she was frustrated by her inability to use e-mail via the workstation and other interactive web-based services. She pointed out that a number of services on the Internet would provide you with information or updates, etc. if you subscribed to the service. In addition, she would sometimes get the e-mail address of someone to contact but could not. She recommended that users be able to have e-mail addresses so they could "take full advantage of the Internet connection."

In one sense she felt proud of the library for providing this service. She believed that the library's involvement in this project was the perfect role for the library: educating the community, providing training for new computer-based services, and providing Internet access to *everyone* who wanted it. The service, in her opinion, had greatly increased the visibility of the library throughout the county, more people were using the library, and the county now had access to global information and perspectives that it never had before the project.

She was surprised to learn that the project was "soft money" and that there were no resources for upgrading and continuing the project. She thought that such a project was a very important thing for the State Library to be doing and wondered why future resources would not be dedicated to continuing the project since, in the scheme of Pennsylvania's budget, this was a "drop in the bucket." On the other hand, she doubted that residents of the county would provide additional tax support for the library as a result of this project. Nonetheless, she thought the project was a "great success," hoped it would be continued and expanded, and recommended that the library needed more workstations, at least one more for the public and one dedicated to staff use.

LIBRARY D

While this library is classified as rural in terms of population density, it is actually suburban in nature due to its proximity to the state capital. The county population is 204,000, and continues to grow. Growth is fueled by the county's proximity to a major urban area, a power utility, Sprint (although Sprint is currently downsizing), a law school, and a liberal arts college which is directly across the street from the library. With such employment opportunities, the county has the lowest unemployment in the state.

The population served by the library is approximately 45,000, although the director stated that "we serve the entire county with our federated library system" (more on that below). The library budget for FY1997 is $450,824, of which over half comes from state and local funds. Indeed, the library received $192,913 of its budget from a county library tax -- only nine of the 67 counties in the state, including this one, have such a tax.

Of further interest concerning this library is that it is part of a seven-member federated library system. The seven member libraries within the county are independent of one another in terms of funding and management. The libraries, however, coordinate numerous services and are in the process of installing a common on-line public access catalog (OPAC).

Interview with the Director

The director had been in her position for nine years, and had witnessed a great deal of change during that time -- from installing the library's first OPAC to installing a new OPAC within all seven federated libraries to gaining access to the Internet. Interestingly, the OnLine PA terminal was not the library's first connection to the Internet. The local newspaper, which now is also an Internet service provider (ISP), donated a computer and dial-up Internet connection to the library back in October 1995. With the arrival of the OnLine PA terminal in October 1996, the newspaper removed its donated computer but continues to provide an Internet connection free of charge to the library.

Overall, the director is "very happy" with the OnLine PA project, and considers access to the Internet a "wonderful tool." While the director did not participate in the OnLine PA training sessions, she made sure that appropriate library staff did.

Context of the County

The county is experiencing both growth and high employment. It is unlike many counties in the state as it has sustainable industry in the area, and also serves as a suburb to the state capital. Thus, the county is not currently experiencing any financial difficulties.

The county is also one of only nine in the state that has a separate property-based library tax. This tax provides the library with nearly 43% of its budget, serving as a significant source of funding for the library. The funding is distributed to each of the seven federated library system members using a population served- and hours of operation-dependent formula.

The county is in the process of substantial automation projects. Indeed, the county has two full-time technology staff -- a network administrator and a computer technician -- that also serve the library system. The computer technician splits his time with the county and the seven libraries of the federated library system. The network administrator is configuring and maintaining the OPAC for the library system, and is currently training library system staff on the use of the OPAC.

Although the consultants were unable to meet with county officials, it appears that there are significant efforts to automate the county that include strategic information technology planning that is conducted through an automation planning committee. This committee is headed by the County Automation Coordinator, who

reports directly to the county commissioners. The director considered the automation process within the county to be open with input from the library welcome.

This emphasis on technology and automation by the 3 county commissioners has resulted in some direct and tangible benefits to the library/library system. For example, the library system was able to persuade the county to provide an additional $120,000 for the library system OPAC upgrade by tying into the county's automation efforts -- particularly county records (e.g., deed records). The library, through the new OPAC, could serve as a public access point to county documents.

The county population seems supportive of the library, as witnessed by the large number of computer (old) donations to the library. Many of the donations were recycled throughout the federated library system as OPAC terminals. Indeed, the donations served to significantly increase the number of OPAC terminals available to the public.

The Federated System

The federated system consists of seven libraries, each with its own board. The system reports to the 3-member county commission.

The library system had a collaborative process in place for book loans and returns. The new OPAC, however, solidified the cooperation between the system members, as the members had to agree to centralized patron and loan records, as well as a plan to implement the new OPAC in all libraries. This included assisting two library members to automate, as they were not automated prior to the new OPAC. The OPAC is to be installed over the next several months throughout the federated system.

Funding for the OPAC (approximately $800,000) comes from LSCA/LSTA money, county funding, and each library member (in proportion to their budgets, size, etc.). LSCA/LSTA funds provided $200,000 for the OPAC.

Connectivity

The library receives its Internet connection free of charge from the local newspaper through the newspaper's ISP component -- "Cumberlink." The newspaper has even offered to provide the library with additional free accounts should the library desire to connect additional computers. Reliability of the ISP has not been a factor at this library. The library pays $320 per year for the phone line (about $27/month).

The director envisioned a time in the near future when patrons would be able to access the Internet through the new OPAC. Such discussions are currently on hold due to "getting things up and running," but are clearly being considered.

Training

Although the director did not attend the training sessions herself, members of her staff did. The individuals who did go were both engaged and willing to use the Internet in library activities. The consultants were able to speak to one of those individuals who commented that the training was generally helpful, but limited in scope and too far apart (more on this below).

Those staff who did attend the training continued to provide some training to staff who did not attend. One staff member in particular seems to provide the rest of the library staff with technical and Internet-based assistance.

The director noted that there is no on-going training program in the library. However, the director is working to develop a small training room in the library that would provide Internet training to both staff and the public. There is currently a temporary training facility in the library for training various member library staff on the use of the new OPAC. The computers, however, will be distributed to the library system members for use as OPAC terminals.

The director commented that training staff to update their technical and Internet skills was critical to the success of the library's Internet use. The director remarked about the "frustration" that she and her staff felt over the public's, particularly students, higher degree of technical and Internet skills. The disparity between the skill sets of library staff and the public created a serious problem -- both practical and psychological -- for the library: librarians wanted to help patrons with the Internet, but in many cases had only limited knowledge themselves. Moreover, librarians found it incredibly difficult to gain the expertise necessary as the workstation was constantly in use.

Use and Acceptable Use Policies

Prior to installing the OnLine PA workstation, the system member libraries agreed to a one hour use limit. The libraries are in the process of changing the use limit to a half hour. Patrons must register to use the workstation, but do not need to possess library cards.

The system members also developed an acceptable use policy. This policy is currently being revised to more clearly limit the libraries' liability with regards to use of the workstations by minors. The member libraries do not require parent signatures or supervision for children to use the workstation.

Interestingly, this library uses filtering software. However, as discussed in the user section, savvy users (particularly underaged) know how to circumvent the software. The director intends to use the new policy under development, as well as the recent Supreme Court order striking down the Communications Decency Act, to remove the filtering software. Thus far, only one user has presented any problems with regards to accessing pornographic material.

Marketing and Expansion

The library received a myriad of press and word-of-mouth concerning the OnLine PA terminal. The director is, however, reluctant to pursue additional publicity as the workstation is in constant use. Without additional workstations for both patrons and staff, the director is not actively seeking "more press."

With a college directly across the street from the library, the director expressed her desire to forge a cooperative agreement with the college for Internet connectivity. The college has better connectivity, and it would not be difficult to tie-in to its backbone. With a more robust Internet connection/service, the director would more actively promote the library's connection.

Work Load

The director commented that the Internet workstation required additional effort, training, and service provision by the library's staff -- without sacrificing current/regular library services. Indeed the librarian who happened to be working the reference desk also assisted users with the workstation to the extent that they could. Too often, however, the librarian could provide only momentary help to individuals using the workstation as a line would form at the reference desk or the phone would ring. The director saw no immediate solution to this problem, since it was unlikely that the library would be able to hire additional staff.

A related, but key issue, is staff value. At present, staff starting salaries are $5/hour with a maximum of $6.50/hour. With such low salaries, the director felt it difficult to motivate staff to jump onto the Internet (although many were interested on their own).

The director was in the process of seeking volunteers with technical experience to assist the library provide Internet-based services. While the library has access to some technical assistance from the county, the director would like to see more direct Internet-related assistance -- e.g., PC configuration, searching and browsing, reference, etc.

Benefits

The director considered the benefits of the OnLine at PA Libraries project to the library to be numerous:

- It "put libraries on the map" within the community. Libraries had always been viewed as the "step sisters" of network-based information, and the OnLine at PA Libraries project provided libraries with an opportunity to come to the fore.

- It provided an immediate and noticeable expansion of library resources. The library was now able to gain access to a number of previously unavailable resources.

- The library was more actively pursuing technology planning activities. Although this was already underway due to various projects, the OnLine at PA Libraries project increased the necessity for technology planning.

- The library is pursuing new collections development activities to supplement Internet use. Directly as a result of Internet access, the library now subscribes to a variety of Internet magazines and has purchased numerous Internet guides.

- It has brought in new patrons. The library has attracted new patrons directly as a result of the workstation.

With these benefits, the director considered the project a great success.

Issues and Recommendations

While the director expressed appreciation to Bell Atlantic, the Office of Commonwealth Libraries, and the SIU, she had the following recommendations:

- Provide for additional terminals. One terminal, while a good start, is simply not enough to meet the needs of both the public and library staff. Library staff need dedicated terminals to gain proficiency in the use of the Internet as a reference tool, and the public needs additional terminals so as not to endure long waiting times.

- Faster connection. The 28.8 connection is adequate for some searching and browsing, but, increasingly, sites are enhancing their graphics and other features that require greater bandwidth.

- Provide more frequent and targeted training. The director acknowledged that it is difficult to provide all the system member libraries with appropriate training due to the varied technical experience of the library personnel. However, the director recommended two types of training: 1) Technical, which would address general and advanced computing issues -- e.g., computer configurations, printers; and 2) Internet, which would address searching, navigation, and reference issues -- e.g., collection development, searching techniques, etc.

- Electronic collection development. While the director viewed the Internet and its vast resources as a welcome addition to the library's resources, she did not consider the OnLine PA workstation and the access to the Internet it provided as a substitute for library collection development activities. There is inadequate access, time, and knowledge on the part of librarians at present to forgo existing printed resources.

All the recommendations/issues raised by the director indicate the positive impact that the OnLine PA workstation and access to the Internet have provided the library -- it is simply a case of learning more, getting more access, and having the opportunity to integrate Internet-based resources into library activities.

Library Staff Meeting

This meeting was attended by three library staff members -- a children's librarian, a reference librarian, and a technical services librarian. The three had an average of 6 years experience in their current positions. Another staff member who had substantial OnLine PA experience, including attendance at the spring training session, was on vacation during the site visit.

All stated that they were pleased with the addition of the Internet to the library's resources. Although the library had an Internet connection prior to the OnLine PA project, they found the new computer and connection to be a substantial improvement over the previous configuration/equipment.

Types of Users and Uses

All agreed that it was difficult to classify the "typical" user of the OnLine at PA Libraries project. Users were of all types -- elementary/high school students, working professionals, and retired. The only "missing" users were college students, but the librarians attributed that to the better Internet connectivity, access, and equipment that the college provided its students.

The reference librarian has kept some monthly workstation use statistics demographics. For the months of February-April 1997, an average of 193 users per month used the workstation. Of those, a vast majority, 144 (75%), were 16 or older. Interestingly, an average of 62 (32%) users per month were new users, while the rest were repeat users. Thus, the workstation steadily attracts new users while simultaneously maintaining a solid repeat clientele.

The types of information sought by users of the workstation reflected the diversity of the user community itself. Overall, however, the librarians found users to generally search for information on the following topics:

- Job and employment opportunities;
- Financial/investment;
- Travel/vacation;
- Medical and health;
- Research for various school assignments;

- Individual research; and
- Government information.

The range and scope of the researched topic areas reflected both typical and expanded uses of other library resources.

Internet as a Library Resource

Due to training, access, and familiarity issues (discussed below), the librarians did not use the workstation for routine reference questions that could be answered through existing library reference material. Rather, the librarians used the Internet to get answers to hard-to-find/obscure questions. Examples include:

- Why are school buses yellow?
- Why are there those signs with 3 crosses on the highways?
- What was the content of the Vincent Foster (author's note: President Clinton's council that committed suicide) suicide note?

The librarians would not have been able to answer such questions for patrons without the Internet.

The librarians had not engaged in any formal Internet-based resource/collection building activities. At most, they create and organize selected bookmarks for particular information. One noteworthy, but irregular, activity that the librarians engage in is tracking reference questions (the question, and URL used to answer the question). Due to the lack of time, however, not all requests are logged or shared with other librarians.

Training, Use, and Frustration

The librarians lamented the training situation for use of both the computer and the Internet. One of the librarians attended the spring training session and found it to be "excellent." The 3 complaints raised about the training session regarded 1) timing -- it was too long after the workstation was up and running; 2) distance -- the training sessions offered were located at a "great distance" from the library; and 3) level of instruction -- although the librarian from this library did not have difficulty in the session, it was her impression that others did due to the level of Internet familiarity that was expected from the attendees.

The librarians were frustrated by the Internet situation within the library. While all found the Internet and the OnLine at PA Libraries project to be of great value to the library, none could really sit down and learn either well. The library is open 62 hours per week, and the workstation is in use for nearly all 62 hours. Librarians, therefore, can rarely, if at all, practice what they have learned or read about. As one

librarian commented, "the best way to learn the Internet is by doing, and we never really get a chance to do that because it's always being used."

The lack of familiarity with the Internet and computer made the librarians often "feel like idiots" because patrons generally knew more about both than did the librarians. This was an uncomfortable turning of the tables for the librarians who were used to being the relied-upon experts.

For the librarians, there is a need for two types of training: 1) General computing skills -- during which librarians would be instructed in computer use, hardware, etc.; and 2) Internet searching and use skills -- during which librarians would gain much needed "Internet as a tool/resource" instruction. The computing skills training was particularly important as users were constantly finding ways to circumvent the Fortress security program and change the workstation's settings.

In terms of patron training, users currently receive "quick and dirty" introductory sessions that consist of basic use skills -- mouse movement, use of Netscape, and basic searching. The sessions typically last 5-10 minutes.

Interestingly, however, the librarian who could not attend the meeting had organized a variety of user training sessions that were conducted by outside corporate sources on a volunteer basis. The training sessions ran monthly for a period of 2 years and covered both introductory material as well as courses on specific material (e.g., medical information). The courses were offered in the library, with the trainers demonstrating course content through a single terminal with an overhead display. These sessions no longer run.

Marketing and Expectations

The librarians expressed concern over the use of the terminal and marketing. Basically, the library could not sustain any more users than the current level. Indeed, as mentioned earlier, the library was in the process of adopting a half-hour use policy rather than the current one-hour use policy.

Another draw-back to the publicity -- both about the Internet in general and the library's connection in particular -- was that many users came to the library with false expectations of the scope, nature, and reliability of information available through the Internet. Librarians found themselves having to educate users, as best as possible, about the Internet itself and the availability of Internet-based information. Simply put, users expected the Internet to provide them with everything they wanted to know about a topic instantly.

Work Load

The librarians viewed the OnLine at PA Libraries project as an increase in their work load. The librarians provided patrons with Internet instruction, tips, and assistance while simultaneously performing their reference desk duties. There was

no release time from other activities to pursue Internet instruction, etc. As a result, the librarians viewed the workstation as a work generator.

Benefits

The librarians pointed to several tangible benefits derived though the OnLine at PA Libraries project. These include:

- Access to a wide source of information that the library could never afford to purchase or maintain in its collection;
- Provision of answers to questions "without having to go outside the library;" and
- Enhancement of the library's image as an information source in the networked environment.

The librarians considered these benefits to be tremendously important and indicators of the project's overall success.

Issues and Recommendations

The staff essentially had two recommendations:

- Provide librarians with their own workstations. At present, librarians were in competition with users for the workstation and the patron was given preference. Librarians, therefore, had little chance to hone their computing and Internet skills.
- Provide more frequent and targeted training for staff. The librarians felt that they needed regular training sessions that would increase their computing and Internet skills to "keep pace with users."

Access to more technology and training to gain a better understanding of those technologies would serve to "keep the library a vital resource" in the community.

Luncheon Focus Group with Neighbor Librarians

The lunch included librarians from three federated system libraries in addition to the visited library. One was a library director, one an assistant director, and the third was a reference librarian. Each had been in her current position between 4 and 12 years. They represented libraries had budgets that ranged between $125,000 and $500,000, the population served for the libraries ranged between 9,000 and 67,000, and the circulation ranged between 85,000 and 450,000.

For two libraries, the OnLine PA workstation was the first library access to the Internet. One had received the same Internet workstation/connection from the local newspaper as had the case site library. All considered the OnLine PA project to be successful, a "good thing" for their library, and a tremendous resource.

Users and Uses

Although the libraries were members of the federated system within the same county, they served very different populations: rural, urban, and suburban. As such, the libraries served a diverse set of patrons, and the use of the OnLine PA workstation reflected that diversity.

The group estimated that 25-33% of the workstation users were new to the library, with the rest being regular library patrons who found the addition of the workstation to be of great value. The users ranged from white collar professionals who had access to the Internet elsewhere to blue collar workers for whom the library was the only source of access to the Internet to students who used the Internet to complete school assignments.

The workstations were in constant use in all the libraries. Two had instituted sign-up policies that limited use to an hour at a time. As part of a federated system policy, however, all were moving to a half-hour use policy.

Typical types of information for which users search includes:

- Job/Employment information;
- Research activities, both work- and hobby-related information;
- School assignment-related information for various report and research projects;
- Government information; and
- Consumer information, such as travel/vacation and automobiles.

The librarians noted, however, that the range of topics continues to increase as users gain in their understanding of the Internet as an information source.

Use Policies

As mentioned above, the libraries, through the federated system, are adopting time limit policies of a half hour. In addition, the libraries, once again through the federated system, are in the process of modifying the workstation's acceptable use policy.

The new policy is essentially an attempt to limit the libraries' responsibility/liability when users, particularly minors, access inappropriate

material. The policy shifts the responsibility from the library to the parents. The librarians expressed concern over using filtering software (as does the case site library) that broadly limits access to Internet-based information and did not want the role of determining *who* could access *what* material on the Internet.

Gaining Additional Support for the Library

As mentioned previously, the federated library system, due to the county commission's emphasis on technology/automation, has been successful in gaining additional technology-related funding for the systems's new online public access catalog. The participants were optimistic that this support would translate into additional support specifically for Internet access. It is unclear, however, as to whether this will happen.

Librarian Access

All librarians commented that the terminal is "in use all day every day," clearly speaking to the success of and demand for a public library-based public access terminal. Because of this success, however, the library staff could not get access themselves. As a result, the participants lamented their inability to truly hone their Internet skills. This left librarians unable to provide patrons with all the assistance that they (both librarians and patrons) wanted to.

Training

All the participants had attended the Spring training session and found it to be informative and well conducted. They suggested the same two-fold training approach that the case site librarians had: 1) Technical training that would address general computing use issues including the management of the computer through Fortress; and 2) Internet training that would provide "tips and tricks" for searching, browsing, and resource location.

The consultants suggested the creation of a notebook for libraries that could be updated at regular intervals. All thought that it would be a great resource for the SIU (or Commonwealth Libraries) to create and distribute such a "tips, tricks, and resources" notebook to each participating library. The idea of this notebook would be to have several sections -- e.g., searching, government information -- for which updates could be distributed on a regular basis (i.e., monthly). This way, librarians would have a current resource guide to selected Internet-based information tailored to PA library needs.

Only one of the participating libraries provided regular user training sessions. This library provided a weekly half-hour training session for up to 2 users. The session provides for basic computing skills such as mouse use as well as basic Internet browsing and searching skills. The other libraries provide on-demand 5-10 minute introductions to the OnLine PA workstation/Internet.

The 5-10 minute session "satisfies most users." Librarians commented, however, that the "real problem was when we get a total 'neophyte' who needs help." Such users could not really be helped with such a brief training session, but "we can't help them more because we're on reference desk duty or doing something else" in addition to assisting with the workstation.

Benefits

The librarians cited numerous benefits that their libraries attained due to the OnLine PA project that include:

- Expands collections. Librarians were able to gain access to a wide range of information to which they would not have access otherwise. As one librarian stated, "it opens a whole new avenue of resources." Such information included daily newspapers, government information, national yellow pages, and state and local information.

- Provides access to the Internet for those who would not otherwise have access. Many users of the workstation do not have any other means of access to the Internet. As such, the workstation serves as an equalizer to networked information.

- Serves as a catalyst for library and system-wide technology planning activities. The influx of new technology -- OPAC and the Internet -- to the library system has created a huge incentive for the libraries to engage in IT planning activities.

- Brings new image/new patrons. The very fact that the libraries have the workstation lends them greater credibility within their respective communities. Moreover, the added credibility has served to bring in new patrons.

- Exposes patrons to new technology. Some users were so impressed with the Internet that they purchased computers/Internet accounts for use in the home.

The librarians found such benefits to be invaluable to the library and business community, and expect that there will be future opportunities afforded the libraries because of the project.

Issues and Recommendations

Due to the public access nature of the OnLine at PA Libraries project, the lack of multiple terminals, and the lack of dedicated Internet time or technical support, the librarians confronted the following issues:

- Lack of access for librarians. Each of the libraries only had the one workstation, and this was in constant use by patrons. As a result, librarians could not advance their own Internet and computing skills.

- User expectations. The media had "hyped" the Internet and its capabilities as a vast information resource to such an extent that librarians were put in the position of dealing with false user expectations.

- Technical support. The lack of dedicated technical support put the librarians "on the spot" whenever technical difficulties arose. The librarians acknowledged that they were better off than most as they had some assistance from the county. The SIU also provided help, but this was not always as timely as necessary -- having dedicated technical staff would be a true plus.

- Work load. Rather than the Internet alleviating librarian duties, it served to *increase* them. Access to the Internet required that librarians be technically literate, network literate, and have vast Internet searching skills. None of this made life easier for the librarians; rather, many felt apprehensive as patrons were able to navigate the Internet more readily than they could.

These issues led to the following recommendations:

- Provide additional terminals for librarians. With the public constantly using the workstation, librarians do not get the opportunity to familiarize themselves with either the computer or the Internet.

- Enhance the connection. 28.8 is fine for some types of use, but not for the ever-prevalent graphics and video.

- Provide more training at closer intervals and locations. All commented on the need for continual training sessions on a regular basis. Some also felt that the locations of the training sessions needed to be closer to the libraries' region.

- Create a state-wide resource guide that could be updated at regular intervals. At present, there is very little sharing of information, tips, or resources between librarians and library systems involved in the project. A guide created and managed by central entity with regular updates would be a valuable resource.

- Provide on-premises technical support. When problems arise, help needs to be immediate. This is not the case, and frustrates both the librarians as well as patrons.

- Create on-duty Internet exploration opportunities. The librarians commented that it would be extremely helpful to have some working time to hone their computing/Internet skills uninterrupted and without competing with patrons for access to the workstation.

Acting on these recommendations would, according to the participants, enhance the quality of the OnLine at PA Libraries project beyond its current "wonderful" level. None of the librarians expressed dissatisfaction with the project -- quite the contrary. Rather, they were looking for ways to augment the project and take it to a next level of service.

Focus Group with Users

The user focus group consisted of four users of the public access workstation. The users ranged in age from 27 to 69, and use the workstation between 2 and 20 times per month. The focus group lasted for 90 minutes. One user was retired, one was a kindergarten teacher, one was unemployed, and one was a social services employee.

General Impressions

All participants hailed the arrival of the OnLine PA workstation and access to the Internet in the library. To these individuals, the workstation brought "the world to our community," as one participant stated. With such access to essentially a "limitless amount of information," the workstation became a valuable tool to these users. This was particularly the case for these users, as none had or could afford a computer or Internet account of their own, or could use an Internet-accessing computer elsewhere.

These users also noted that the workstation and access to the Internet increased their image of the library as a provider of information and information-related services. One user commented that he was "surprised to find the Internet at the library," and that it "keeps me coming back."

Types of Information Sought

All four of the users made different use of the workstation. These uses included:

- Job search information;
- Science information for classroom instruction (e.g., Mars landing information);
- Legal research;
- Technology grant information;
- Medical information; and
- Vacation planning.

Each user considered the vast amount of information and resources available to them via the Internet (workstation) to be "incredible." One user summed up the

sentiments of the participants when she said "I could never, either through other sources or through the library, have access to all the things I can now find on the Internet."

Uses of the Information

What was perhaps most interesting to the consultant was that each of the users acted upon the information he/she sought. For example:

- The kindergarten teacher actively sought information about the Mars landing, printed a number of images, and incorporated the information into lesson plans for her students. The students "love it" and thought that it was "cool," particularly the photographs.

- The social services employee used the workstation for multiple purposes such as legal and medical research and technology grant information. This individual did volunteer work in a local non-profit organization and used the grant information to successfully apply for a computer for that organization.

- The retired individual planned an entire Hawaiian vacation through the Internet one year in advance. He even used the information found about airfares and accommodations to negotiate with local travel agents.

- The unemployed user was actively searching newspapers nationwide for employment. He applied for jobs based on his findings.

As one participant stated, "there is no way that I could have gotten all this information without using the Internet."

Frustration -- Learning and Training

None of the users was "particularly skilled in computers or the Internet," as one user stated. Some had experience with computers through work or school, but this was mainly for such business applications as word processing and spreadsheets. Moreover, none had experience with Windows 95 (the operating system on the computer).

The participants noted that very little training was available, if any, from the librarians. All commented that the librarians "tried to help," but that "their help was a little here and a little there." All agreed with what the librarians had said in an earlier session -- that "they [the librarians] were helping you while they were doing other things." As a result, the librarians could not provide the needed assistance.

With the training/assistance situation such as it was, the users sought help elsewhere -- either through Internet guide books that the library purchased, or, more often, from the "kids" who were around. All four participants commented that there was a group of "kids" (14-17 years old) who were quite good at using the workstation

as well as the Internet. Indeed, these "kids" provided the users with a variety of assistance such as using the computer, adding bookmarks, searching the Web, downloading information, and printing files. In fact, one user commented that the "kids" knew how to get around the Fortress security program as well as the filtering software. Some even knew how to send e-mail -- a feature that the librarians thought they had turned off.

The lack of training and computer/Internet skills frustrated the users tremendously, particularly given the time limit on the workstation. As one user put it, "it takes me 35 minutes just to find what I want -- every [search engine] is different, and I don't know how to use them all. By the time I find things, my time is up."

It is interesting to note that none of the users blamed the librarians per se for the librarians' inability to help. The users understood that the librarians were performing other duties while also assisting with the workstation. The users, however, commented that regular tutorials would be of great assistance.

Recommendations

The users, while positive and appreciative of the access to the Internet that the workstation provided, had the following recommendations to enhance the library's Internet services:

- Add more workstations. The users wanted to see more workstations in the library, particularly due to the imposed time limits on the use of the workstation.

- Increase the speed of the connection. Users found the connection to be relatively slow, particularly for accessing and printing images.

- Provide regular tutorials/training sessions. The users commented that the tutorials/training sessions do not necessarily have to be conducted by librarians -- just that there should be training available in the library for the connection there. The training should emphasize searching and retrieving information.

- Provide training for the librarians. The users thought that it would be better for both the librarians and the patrons if the librarians were more knowledgeable in using the Internet and the workstation. Although all commented that the librarians tried to be as helpful as possible, they relied more on the assistance from "kids" who were in the know about the Internet than the librarians.

Such improvements would enhance an "already wonderful resource" in the library, and would keep the users coming back.

DOCUMENTING THE SUCCESSES AND IMPACTS

This chapter documents the successes and impacts that resulted from the OnLine at PA Libraries project as described by participants at four different public library sites around the state. The information presented in this chapter summarizes responses from a range of participants and thus, *reports what they said and thought*. Remarkably, there is much consistency in identifying those successes and impacts as well as identifying key issues yet to be addressed. Indeed, many of the "successes" reported in this chapter are especially powerful as they come directly from project participants. Moreover, the successes identified from the case site visits collaborate findings reported in Chapter 2 from the various surveys. The next chapter provides an overview of key issues, lessons learned, conclusions, and recommendations regarding the project based on the consultants' assessment of findings reported here and in the previous chapter.

CHAPTER 4

CONCLUSIONS AND DIRECTIONS

Previous chapters to this report described a range of findings that document the successes and importance of the OnLine at PA Libraries project. Over the course of the project, significant advances were made in the provision of public access to the Internet via rural public libraries; librarians received training on how to best use and deploy the public access workstations; and citizens throughout the state were able -- some for the first time -- to access the Internet and take advantage of a new world of information and services.

The purpose of this chapter is to briefly discuss some key aspects of the project and selected key project findings. This discussion points to next directions that theOffice of Commonwealth Libraries, the public librarians, and others in the state might take to build upon the successful work accomplished in the OnLine at PA Libraries project. In addition, the project and project evaluation provide some useful lessons that can inform "next steps" as the state continues to move forward in its support for public library services.

SUCCESSES, IMPACTS, AND ISSUES

The findings presented in Chapters 2 and 3 provide a wealth of information regarding the implementation of the OnLine at PA Libraries project. The purpose of this section is not to repeat the information described previously. Rather, this section highlights successes and issues that are especially important to note.

Successes and Impacts

From the viewpoint of project participants -- be they library directors, library staff, users, or local government officials -- the project has clearly been successful. The list of the various benefits and impacts that have come to the library, the users, and the community overall, is significant and consistent across most libraries. Some of the most important indicators of the success of the project are that it:

- Increased the visibility and credibility of participating libraries;
- Provided valuable publicity for participating libraries as a public access point to state-of-the-art technology and information services;
- Provided a workstation and additional information technology that otherwise could not have been purchased or obtained by participating libraries;

- Provided access to a range of networked information resources and services that otherwise could never have been obtained by participating libraries;
- Served as a catalyst for participating libraries and their staff to move into the electronic networked environment;
- Removed some of the isolation of the community by providing a "link" between the participating libraries' communities and the ideas, resources, and information in a global setting;
- Linked networked information to users and resolved a range of their information needs that otherwise would not have been resolved; there were numerous "success stories" of how public access to the Internet greatly assisted users; and
- Brought new users into participating libraries who otherwise may not have used "traditional" library services or resources.

Other key indicators of the success of the project include the following:

- 26% of users of the public access workstation were *new* users, i.e., they had not previously visited the library.
- The public access workstation attracts both expert -- 44% -- and beginning users -- 48%.
- 35% of users of the public access workstations had no other means to access the Internet *except* from participating in the OnLine at PA Libraries project. Perhaps equally interesting is that the other 65% *do* have access to the Internet elsewhere (e.g., work, home, school), and still choose to use the public access workstation.
- Users of the workstations (on a scale of 1= Very much so and 5= Not at all) rated finding the information they needed on the Internet, the ease of using the Internet via the library, and the importance of having access via the library between 1.7 and 2.2. Overall, therefore, users find that gaining access to the Internet, using the workstation, and the information found on the Internet to be of value.
- In terms of major benefits from the project, 48% of participating library directors thought the expanded availability to reference sources was critical; and 32% thought the major benefit was attracting new users to the library.

During the sample week in May 1997 that the user surveys were distributed, one can estimate that some 7,600 patrons used the public access workstation in participating project libraries. As this report is written in October 1997, the authors would estimate that currently the number of users has significantly increased since the May survey -- and will likely continue to increase especially with the additional 55 libraries that have been added to the project since the summer of 1997.

A number of additional successes and impacts are noted in Chapters 2 and 3. But it is important to state clearly and without reservation that based on the data from the surveys, interviews, site visits, and other data collection efforts, the findings point to an overwhelming agreement as to the success of the project. Indeed, the enthusiasm and support for the project from participants at the site visits was especially overwhelming.

Impact on Users

A key success of the OnLine at PA Libraries project is the impact the project has had on the user community. Access to the Internet provides users with numerous benefits that include:

- Access to a wide variety of otherwise unavailable resources, such as employment opportunities, research-related material (particularly for students), and historical information;
- Equalization of information resources by eliminating the "small library with a small budget" situation. The workstation immediately provides users from all walks of life with, literally, world-wide information resources;
- Career opportunities due to the technical and Internet skills that users acquire through use of the OnLine PA connection;
- Business opportunities for small businesses, as owners of small businesses research and explore various business ventures -- both for traditional and Internet-based business activities; and
- Incorporation of Internet-based information by teachers into classroom curriculum development.

The project has, therefore, had a tremendous impact on users and the communities in which they reside. Access to the Internet has created business and job opportunities, decreased the "information remoteness" often experienced by rural communities, and expanded educational capabilities for both students and teachers. Viewed user-by-user, these benefits may seem small. In the aggregate, however, these benefits have a tremendous impact on Pennsylvania's communities.

Selected Key Issues

As with most successful initiatives such as the OnLine at PA Libraries project, there is also a need to identify a number of important issues. Once again, there are numerous key issues described throughout this report. But, this section highlights those issues that the consultants think are especially important.

Maintaining the Initiative

Participating librarians are concerned about how they would maintain the initiatives begun by the project. Indeed, 90% of the library directors indicated that, while they found the public access workstation extremely valuable, their libraries could not afford the workstation on their own. For most, the reality is that no additional resources were (or will be) forthcoming to add additional terminals, purchase upgrades, or otherwise enhance their Internet-based services. Thus, initiatives would have to be supported by redeploying the existing limited budgets found in most of the libraries. The evidence suggests that while some additional support from fund-raising did occur as a result of the project, the libraries did not obtain direct budget increases -- nor do directors think it is likely that they will receive such increases -- in the near term. Strategies will need to be developed to continue resource support for project objectives as well as next steps resulting from the project.

Enhancing Librarian Skills

The library staff typically agreed that they need additional training, need additional time for such training to occur, and feel very "inadequate" in providing assistance to users -- who oftentimes knew more than the librarians in accessing the Internet and various Websites. If allowed to continue, this situation may result in some increased frustration and anxiety on the librarians' part and *injure* the future development of public access Internet services from the library. Programs for additional training of librarians will be essential if the project is to maintain its momentum. These programs can be coordinated among the local, district, and state library.

Public Access versus Staff Use of Workstations

The project was designed to provide *public* access to the Internet and not necessarily to promote staff use of the Internet in the library *per se*. For a number of the staff at these sites, this preference for public access made it difficult to learn how to use the workstation (since the public had "priority" for its use); it minimized the degree to which the workstation could be integrated into library services (such as

administrative applications and reference and referral services); and it limited staff opportunity to experiment in the use of the workstation. Library staff need to use the lessons from the OnLine at PA Libraries project to now move into how best to integrate Internet-based services into the library overall.

Developing OnLine PA Project II

The original project has done an excellent job in accomplishing proposed objectives. But the project has been so successful that participants -- at least at these sites -- now have a range of expectations for a next, or follow-on, project. They want to build on the success of the current project and anticipate the "next steps" for enhancing their access to and use of networked information resources and services. There is an important opportunity for the state library to propose a strategic initiative to build upon the success of the OnLine at PA Libraries project and continue to enhance access to Internet-based resources and services through rural public libraries.

LESSONS LEARNED

For many of the participants in the project there are important lessons that have been learned as to how best to design, implement, and administer an effort such as the OnLine at PA Libraries project. Discussed below are some of the more important of these lessons that contributed directly to the success of the effort.

Role of the SIU

The success of the OnLine at PA Libraries project is due to many people and groups. But the role of the Schuylkill Intermediate Unit (SIU) in organizing and managing the project certainly was critical for the project's success. The SIU had a very difficult set of responsibilities and tasks that had to be balanced across 188 public libraries -- many of which had unique contexts and situations into which the workstations would be operated.

The use of written agreements between an individual library and the SIU detailing responsibilities for involvement in the project was an important component that helped everyone to understand who was to do what and who was responsible for what (see Appendix A). Equally important, the agreement specified the importance of the evaluation component and made clear the expectation that librarians would participate in a range of data collection activities. Clearly, the high response rates to the evaluation's various surveys resulted, in part, because of this technique.

Results from the evaluation of the training sessions at both the first introductory training session and the second session on reference indicate a high quality of presentation and content (see Chapter 3). Moreover, it should be noted that mounting such training efforts are very difficult when participants have such a wide range of background and knowledge related to computing and telecommunications.

The SIU had to combine a range of technical, managerial, and interpersonal skills to complete the project successfully. On the one hand, it ordered, configured, delivered, and provided support for all the project workstations. On the other hand, its staff also had to provide direct interpersonal support in how to use these workstations -- in some cases to libraries that had never owned a computer. Thus, the SIU had to decide on a basic initial configuration of the workstation that would provide the most use and services for the most libraries.

While some project participants criticized the SIU for that configuration, for the security built into the workstation, and other concerns, the reality is that the SIU successfully balanced the available resources with the needs of the libraries. The SIU did, in fact, obtain and configure the workstations, deliver the various workstations, and assist library staff in using them, and planned and delivered a range of training sessions. The SIU's management and support of the project was a major factor that contributed to the overall success of the effort.

Raising Expectations

An important outcome from the project is the degree to which it successfully raised the expectations for new types of library services by both the librarians and the citizens of the state. In a number of the libraries that participated in the project, there would have been no way that new public access computer workstations with Internet connectivity could have been provided to users without the support of this project. Once these workstations arrived and were put into use, both the librarians and the users had "hands-on" evidence of how these workstations could improve the quality of library services in that particular community.

Thus, a key aspect of the project was its ability to demonstrate how the new computing technologies and Internet access could make a difference in the quality of library services that directly affected individuals. Rather than talk about how important such new services were, the project demonstrated those services. In most cases, the new network-based services *exceeded* the expectations of the librarians and users. Thus, the project increased awareness of the use of Internet access, how that access can improve library services exponentially (especially in very rural areas), and raise expectations of the role of libraries in the information age.

To some degree, the success of the project also brings additional pressure to the state library to continue to meet these new expectations of librarians and users. Many of the participating libraries, now that they are aware and expect this level of service from their library, ask how they will be able to support these existing services and build new networked-based services. Use logs at these libraries continue to grow and library users demand more time and more workstations to access the Internet. Librarians worry about how they can meet these demands and provide the "next generation" of public access Internet support in their libraries. Time will tell if the raised expectations for networked-based library services from users and the participating librarians will be translated into better funding and support for Pennsylvania libraries.

Statewide versus Local Support for Internet-based Resources and Services

Most participating librarians were quite surprised with the demand for public access to the Internet as a result of the OnLine at PA Libraries project. In fact, as suggested in the site visits (Chapter 3), some were overwhelmed with the demand and had to stop advertising the new service because the lacked the staff and resources to meet this new demand. Worse, as many told the investigators, there was little likelihood that the local governments would be able to find new monies to help the libraries meet these new demands and rising expectations for services.

The lesson appears to be that meeting the demand for high quality electronic library services is a statewide issue, *not* a local issue. While local communities have significant affection for their libraries, the demand on local resources for basics such as police, fire protection, sewage systems, schools, and others is significant and increasing. For many of these local communities there simply are too many other demands being placed on the government. It is not that the local governments do not wish to support these new initiatives at the library, rather the existing demands for resources preclude the library as a possible recipient for increased support.

Discussions at the user focus groups verify this perspective. The support for the library and innovative library services is evident -- the wherewithal for responding to these demands in many of these rural, economically depressed areas, is not. Indeed, a piecemeal solution of helping one rural library at a time simply is not feasible. While significant results can be obtained from a "one time shot in the arm" as provided libraries by the support of Bell Atlantic, library development is a statewide concern and requires *statewide* support, resources, and solutions.

New Roles for Librarians and Libraries

An important lesson for many of the participating librarians was that maintaining the status quo in their library (in terms of use of technology and networked-based services) was not a viable option. One librarian commented to the investigators that "this project has been a rude awakening as to the skills I'll need to be a good librarian in the future." Another commented that her library, after participating in the project, would never again be "that sleepy, isolated library that didn't need computers."

While there was wide agreement among participants that roles for librarians and libraries had to change, there was less agreement on what, specifically those roles should be, and how they could be supported to make the transition to these new roles. Compounding the problem was the concern about being "forced" to drop some of the existing roles in the library to "make room" for the new roles related to operating in the global networked environment.

Thus, the project has also operated as a huge continuing education effort. The training provided by the SIU is but one component of the education that has taken place for many of the participating librarians. The day-to-day operation of the public access workstation, managing the software, the self-learning of how to surf the Web, the development of skills to teach others how to use the workstation, and the many other skills that evolved occurred in the library, every day, without formal classroom instruction. This experience provides an important base by which the librarians can now discuss possible new roles both for them and for their library.

One role to which librarians alluded was that of technology strategists. Librarians found that the use of emerging technologies such the Internet, combined with other technology-based services such as CD-ROMS and OPACs, required libraries to consider their technology deployment and services increasingly as a whole. As one library director commented, "we need to look at the whole of our services and technology and see what we can integrate, how we can plan, and set some directions."

Prior to the OnLine at PA Libraries initiative, too few libraries had given much serious thought to the impact of technology on library services in general and how to "best" plan for the incorporation of technology-based services into general library services in particular. Clearly, a new role for librarians will be technology strategists and how best to plan for the provision of technology-based, and especially networked-based, resources and services to their clientele.

Data Collection Methods and Instruments

On September 26, 1997, the authors met with staff from the Office of Commonwealth Libraries to review the use of the data collection methods and instruments with an eye toward determining how best they might be improved. This training session provided an opportunity for the authors to share their views on aspects of the evaluation that worked well and others that might be improved.

Figure 4-1 summarizes the range of data collection techniques that the authors considered for use in the evaluation. All of the *qualitative* techniques as outlined in Figure 4-1 were used. For the *quantitative* techniques, network traffic measures and Web log file analysis were not used, although considered, for this evaluation. These two techniques were not used because there were no central servers where statistics could be easily obtained; the cost of placing software on the various workstations to maintain counts was, at the time, prohibitive; and the sheer logistics of coordinating uniform record keeping across participating libraries while they were still learning how to use the workstation simply was not feasible.

Nonetheless, the evaluation profited by the use of a range of data collection techniques. Indeed, an important lesson from the evaluation effort is that the combination of qualitative techniques (site visits, focus groups, etc.) with quantitative techniques (surveys, logs, etc.) provides a powerful approach by which to compare and validate findings. Specific lessons related to the data collection methods and instruments include the following:

- Importance of planning and preparation. The success of these data collection instruments resulted, in part, from their careful development and pretesting. In addition, specific instructions on how to administer the data collection instrument (such as the site visits, Appendix G) are essential.

- Wide involvement and support. The training efforts on how to administer the instrument (such as the user survey, Appendix C) at the second general training session is a good example of the importance of the support and involvement by the State Library, the SIU, and the district librarians to encourage participant involvement in the data collection activities.

- Multi-level distribution and collection network. Related to the *Wide involvement and support* detailed above, is the availability of various support and distribution channels throughout Pennsylvania -- i.e., the Intermediary Units and the District Library Centers -- that can assist in the dissemination, collection, and various other data collection activities. Within each of these entities are individuals and/or consultants with expertise that can greatly assist the state in collecting needed data.

- Modify Part II of the user survey. Part II of the user survey (see Appendix C) asked users to list the various websites they visited during that session. Most did not complete this section. A different approach might be to ask them simply to list the most interesting or most useful website they visited during that particular session. Or, load appropriate software on the workstation that can track the sites actually visited rather than using a survey.

- Participant questionnaires. At each of the focus groups, group interviews, or individual interviews, the evaluators asked participants to complete a short questionnaire (see Appendices H and I). These surveys provided excellent information describing participants and their background and provided a useful context for understanding the discussions. These surveys, however, should be made shorter and stress more demographics and background information rather than asking participants to assess or list particular issues -- which typically came out in the discussion.

- Keyboarding of survey results. The user survey resulted in over 2,000 responses (see Chapter 3) -- all of which needed to be keyboarded for analysis. The large response rate was not anticipated by the evaluators. Were it not for a contingency plan by the SIU which was able to arrange for the keyboarding of all the surveys, only a sample could have been keyboarded and analyzed. The lesson is that costs for keyboarding and data analysis of surveys can be considerable and require a budget.

- Participants in the user focus groups. As part of the site visit, the evaluators asked the participating librarian to arrange for users of the public access workstation to be present at a particular time for a focus group. This approach had mixed success in obtaining an adequate number of participants. A more effective approach, as it turned out, was that library staff simply "snagged" workstation users who were present in the library at the time of the focus group and asked them to participate -- all of whom, when asked, did participate.

All of these lessons identify strategies that can make future data collection activities more effective.

There is a clear need to replicate the user survey during the fall of 1997. The user surveys originally were administered in May 1997. For some libraries they had only been online with their workstation for 5 or less months. At the time, use of the workstations was increasing steadily. A more accurate estimate of the number of users of the workstations would be revealed by administering the survey again, in Fall 1997 and then once every year.

Figure 4-1. Methodologies for On-going Assessment of the OnLine PA Project.

Qualitative	
Technique	**Function/Purpose**
Case Sites	In-depth exploration of selected communities and target audiences in those communities, use of and involvement with the project. Use findings to inform broader quantitative data collection activities such as mail and electronic surveys.
Content Analysis	Gather various documentation and reports to review historical development and evolution of project-related activities.
Focus Groups	Explore identified key issue areas of project content, services, management, and performance. Use findings to inform broader quantitative data collection activities such as mail and electronic surveys.
Small Group and Individual Interviews	In-depth exploration of project content, services, management and performance with key project administrators and users. Assess the relationship between components of the project and future educational use and development of project resources. Use findings to inform broader quantitative data collection activities such as mail and electronic surveys.
Critical Path Analysis	In-depth exploration of user-based interactions with project-related components, e.g., training, workstation use, and searching. Use findings to uncover specific instance issues. Particularly appropriate for in-depth analysis of training and use issues.
Quantitative	
Technique	**Function/Purpose**
Mail/Electronic Surveys	Further explore identified key issue areas of project content, services, management, and performance with broader project population. Test findings from qualitative data collection activities with broader project population.
Network Traffic Measures	Collect network/terminal traffic use statistics such as users, user access points, information and service content use, and network server and router load. Provides sense of network load, capacity, and what services are used with what frequency.
Web Log File Analysis	Measure Web-based services by the analysis of Web server log files. Provides sense of users and locations from which access the services, server traffic, type of technology users have, and errors made.

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In addition, some thought should be given to administering the user survey, or some version of that survey, *statewide* to all public libraries and not only to OnLine at PA Libraries. This effort could be contracted out by the Office of Commonwealth Libraries or it might become part of the annual survey data solicited by the library for Federal and state requirements. Regardless of the approach, the Office of Commonwealth Libraries will want to consider very carefully the types of Internet-related and electronic services data that should be collected as part of its statistics program on a regular basis.

But the lesson to be learned in the area of data collection techniques is that methods can be developed that will identify, describe, and measure the impact of a project such as this on libraries, librarians, the local community, and users. Equally important is the lesson that additional, ongoing, data collection will be needed to monitor the impact of the project, to develop longitudinal data to describe trends (such as usage of the workstations), and to continue to demonstrate the importance and impact of this project.

NEED FOR STRATEGIC PLANNING

This has been an exciting time for many of the libraries participating in the project and especially for those visited by the consultants. For a number of these staff and communities, the library has been thrust into a very visible and central role in the provision of networked information resources and services. But there are conflicting demands that will have to be resolved in the very near-term, including the:

- Need for additional workstations and better connectivity with few additional resources to pay for these enhancements;
- Need to integrate existing and new technologies to provide technology-based services as comprehensively and efficiently as possible;
- Demand for more sophisticated reference and referral services from users and inability of library staff to provide such sophisticated assistance;
- Rethinking and integrating a range of "traditional" library services and activities (such as collection development) in the context of networked information resources and services; and
- Considering new organizational approaches for resource sharing among the libraries, the district libraries, the state library and other organizations.

Many librarians noted that their involvement in this project resulted in *more*, not less work. There is some recognition that they had to change in a number of ways to

support the success of the project. But there was some concern about how best to evolve into this new "networked environment" and how best to obtain resources to support the transition.

The library staff at the site visits are now seeing significant new demands being placed on the library, they see the range of opportunities that are possible in participating in this networked environment, but the path of how to move from their current situation to new roles and services in the networked library setting is unclear. They are besieged with competing priorities demanding their attention and the reality is that the libraries cannot be all things for all people all the time.

The addition of providing public access Internet services and the recognition of the possible networked services and resources that could be provided by the libraries has, and could result in a significant increase in the library staff's workload. If libraries in the OnLine at PA Libraries project are going to thrive and be successful in this evolving networked environment careful planning will be required in setting priorities of what activities are *most* important to be done, and how best those activities can be accomplished.

Thus, there is a need for a statewide rethinking of rural public library roles in the networked information environment. A strategic initiative should be developed to better utilize and leverage resources among the State Library, the district library centers, and individual libraries. This strategic initiative will require a vision of the future, a plan, a budget, a commitment among the library community, and political support at both the state and local level.

CREATING A NEW FUTURE

Public libraries in Pennsylvania have an important opportunity to move forward in the provision of both traditional and innovative and electronic information services to their communities. This opportunity exists because of a number of factors that have come into play as this report is written:

- The statewide attention that has been drawn to the poor support and funding of Pennsylvania public libraries by the investigative paper appearing in the Philadelphia *Inquirer,* "Libraries in Distress," June 1-June 4, 1997.

- The success of the OnLine at PA Libraries project and the evidence that supports that success as described in this report.

- The current state legislature interest as well as interest from the governor's office in public libraries and the increased awareness that the state government may need to take action to support public libraries in more, better, and possibly different ways than in the past.

But to take advantage of these factors, the public library community, with the leadership of the state library, will need to offer a new vision of the role of public libraries as a means for improving the quality of life of the state's citizens, as a catalyst for promoting economic development, and as a link to the rest of the world for life-long education and learning. This challenge is a key part of the "next project" that builds upon the success of the OnLine at PA Libraries project.

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APPENDIX A

Application to Participate in OnLine at PA Libraries Project

Commonwealth Libraries
PA Department of Education • P.O. Box 1601 • Harrisburg, PA 17105-1601

Celebrating 250 Years of Service

May 1996

INFORMATION MEMORANDUM #96-8

SUBJECT: Applications to Participate in "OnLine at PA Libraries"

TO: Directors, Pennsylvania Public Libraries

FROM: Gary D. Wolff
Deputy Secretary of Education

I am pleased to announce Bell Atlantic has awarded a $750,000 grant to the Pennsylvania Department of Education Commonwealth Libraries for public access to the Internet at local public libraries. The name of the project is OnLine at PA Libraries and its objective is to provide timely information available on the Internet to library users, particularly in rural areas where access to online information is less likely to be available.

Commonwealth Libraries will award equipment grants to libraries wishing to participate in the project. Grant funds will also be used to establish network nodes and alternative communications pathways to ensure the access is affordable for small libraries. Schuylkill Intermediate Unit will provide technical assistance and consultation throughout the grant and will conduct training sessions for library staff.

An information sheet and an application for an equipment grant follow this memorandum. Census estimates for 1994, used to identify rural counties and municipalities, will be deposited at district library centers and made available online on Commonwealth Libraries' bulletin board. To access the bulletin board: Telnet to HSLC.ORG, log on as PABBS, choose CBBS from the menu, follow the instructions on the screen and then select PA-LIM.

Attachments

GDW:ds

OnLine at PA Libraries
a partnership of the Pennsylvania Department of Education and Bell Atlantic

Commonwealth Libraries
P.O. Box 1601
Harrisburg, PA 17105-1601

Application for Public Libraries - Due June 15, 1996

Library Name_____

Address_____

City_____PA Zip+4_____

County_____District Library Center_____

OnLine at PA Libraries will provide public access to the Internet through public libraries. This project has been made possible through a grant from Bell Atlantic to the Pennsylvania Department of Education, Commonwealth Libraries.

1. Does your public library provide a public microcomputer with access to the Internet?

   Circle one: Yes No

   If yes, answer questions 2 and 3. If no, skip to question 4.

2. What best describes the public access to the Internet that your library provides?

   Circle all that apply:

   text-based interface only

   graphical interface (pictures and text)

   dial-up access

   SLIP connection

   PPP connection

   full access (Internet workstations have direct text or graphical access. The library may provide e-mail accounts and dedicated 24-hour access to all Internet services. For example, the library is a network node or has a broadband connection to an Internet provider.)

3. Please describe the equipment used to provide public access to the Internet:

   Circle all that apply:

   PC DOS based microcomputer, 286 or less

   Apple Macintosh or other Apple

   PC DOS based microcomputer, 386 or 486

   Modem, 28.8 speed

   PC/Windows microcomputer, 386 or 486

   Modem, specify speed _____

   PC/Windows microcomputer, Pentium

   Printer, specify_____

4. How rural is the library's service area? (Library systems or libraries with branches should attach this information for each site for which they apply to participate in the project. Use system-assigned service areas to calculate population density of members.)

Persons per square mile of each municipality in service area. *List municipality(ies) and check under categories:* (Data is available at DLCs and Commonwealth Libraries, Library Development Office.)

Municipality(ies) (list below)	Very Rural 1 - 50/ Square Mi.	Rural 50.1 - 100/ Square Mi.	Moderate 100.1 - 2000/ Square Mi.	Urban 2000.1 - 4000/ Square Mi.	Very Urban over 4000/ Square Mi.

Attach a page if necessary to list all municipalities in the library's service area.

In signing this application, the library agrees to the following conditions:

a. Any equipment received, such as a microcomputer and modem, will be placed in an accessible public service area and made available for members of the public to use when the library is open. The library will provide a suitable table and chair(s).

b. The library will provide one phone line to the equipment.

c. The library will participate in the project at least two years after the grant year and will pay certain start-up and continuing costs, estimated to be approximately the following:

	Price	First Year	Following Years
*Phone line installation	$125	$ 125	$ -0-
*Telephone bill for local line	$30/mo.	360	360
*Internet provider fee	$15-30/mo.	180 - 360	180 - 360
*Software/hardware maintenance	$200	-0-	200
Training/technical support	$100	-0-	100
		$665 - $845	$965 - $1195

*These fees vary depending on the provider.

d. The library agrees to have at least one public service staff member attend all required training sessions sponsored by Commonwealth Libraries in connection with this grant. It is estimated the staff member will be required to attend two workshops during the grant year held in locations throughout the state.

e. The library agrees to participate in public awareness activities and to promote the project to the public and the local media.

I certify the _____ agrees to conditions a - e, above, and that the
(name of library)
answers to questions 1 - 4 are correct to the best of my knowledge.

_____ _____
Signature, Library Director Signature, Library Board President

_____ _____
Name (please print or type) Name (please print or type)

_____ _____
Date Date

OnLine at PA Libraries

a partnership of the Pennsylvania Department of Education and Bell Atlantic

1. What is "OnLine at PA Libraries"?

   Project goals are:
   - To provide public access to the Internet through Pennsylvania's public libraries
   - To provide library users with timely information for educational, research, economic development and recreational purposes
   - To ensure that trained library staff are available to help the public find the information they need in an online environment

   This project is made possible by a grant from Bell Atlantic to the Pennsylvania Department of Education, Commonwealth Libraries.

2. What will the project consist of?

   Commonwealth Libraries, part of the Department of Education, will make equipment grants to libraries that agree to provide a public access workstation. A typical equipment grant will include a multimedia Pentium microcomputer, high speed modem and software. These grants will enable a graphical, multimedia interface with the Internet.

   Where libraries already provide public access, Commonwealth Libraries may award grants to upgrade that access to a graphical interface to the Internet.

   Commonwealth Libraries will work to establish additional network nodes as appropriate and will work to find alternative telecommunications pathways. The objective is to provide access for participating libraries via local phone calls and to avoid long-distance charges.

   Training workshops will be conducted at various locations around the state for library staff.

   An outside consultant will evaluate the project at both the local and statewide levels.

3. Does this project target any particular type of library?

   Yes. The priority is to improve Internet access for populations in rural areas (see definition on application). Grants may also be made to libraries in other areas.

4. What about large libraries?

   Commonwealth Libraries intends to allocate federal funds--Library Services and Construction Act Title II--to support the goals of this project by setting up local area networks (LANs) to provide access to the Internet for multiple users in district library centers.

Eligibility

- The applicant must be a public library that received state aid in 1996 and that continues to meet requirements for state aid in the future.

- The library director and board president must both sign the application and agree to the following:
  - to place equipment in an area dedicated to public use and provide a table and chair;
  - to provide one phone line dedicated to the project;
  - to continue the service for two years after the grant is awarded and pay certain start-up and continuing costs;
  - to have at least one public service staff member attend all required training sessions; and
  - to participate in project public awareness activities and actively promote the project to the public and the local media.

Criteria for Grant Awards

- The extent to which the library serves a rural population, as measured by the number of persons per square mile (see application form).

- The extent to which the library needs the equipment to provide Internet service, as shown by a lack of available public access workstations or by the documented use of existing workstations.

- The availability of affordable, reliable Internet access within a local phone call of the library. (In some areas, it is expected that equipment grants will not be made until Commonwealth Libraries establishes a network node or identifies a local provider.)

- The extent to which the library is willing to release staff members for training, as shown by the district library center's assessment.

Instructions for Applying

1. Complete the application form and have it signed by the library director and board president.

2. Send the original application form and three copies to the district library center.

3. District library centers should forward the original and three copies with a cover letter. In the cover letter the district administrator or the consultant librarian should comment on the application, discuss its relationship to the district's long range plan and assess the likelihood that library staff will attend training sessions, based on their attendance at district meetings and other workshops.

4. Grant applications must be received by Commonwealth Libraries by June 15, 1996.
   Send applications to: Commonwealth Libraries
   Attention: Barbara W. Cole
   Address U.S. Mail: P.O. Box 1601, Harrisburg, PA 17105-1601

   Address others: 217 Forum Bldg., Commonwealth Ave. & Walnut St.
   (UPS, FedEx, etc.) Harrisburg, PA 17120

APPENDIX B

Participating Library Survey (March 1997)

UMBC

Department of Information Systems

March 13, 1996

Dear OnLine PA Participant:

One component of the the OnLine PA project is to evaluate the impact, benefits, and issues associated with public access to the Internet through the Bell Atlantic-provided workstations. The Office of the Commonwealth Libraries selected Dr. Charles R. McClure, Distinguished Professor at the School of Information Studies, Syracuse University, and Dr. John Carlo Bertot, Assistant Professor in the Department of Information Systems, University of Maryland Baltimore County, to conduct the evaluation study.

One of the many different evaluation project data collection activities is the enclosed survey. To assist in the evaluation process, we are asking that you **complete and return the survey by April 1**. Your participation is extremely important and will greatly assist us in determining the impact and issues associated with access to the Internet through the OnLine PA equipment.

Should you have any questions regarding the survey, contact John Bertot at (410) 455-3883 phone, (410) 455-1073 fax, or via e-mail at <bertot@umbc.edu>. Thank you for taking the time to complete the survey!

University of Maryland Baltimore County
5401 Wilkens Avenue
Baltimore, MD 21228-5398

Tel (410) 455-3206
Fax (410) 455-1073
Voice/TTY (410) 455-3233

SURVEY OF ONLINE PA PARTICIPATING LIBRARIES
Please return by April 1!

Instructions: The purpose of this survey is to help us document and understand the issues, uses, and impacts related to your participation in the OnLine PA project. The survey is sponsored by the Office of Commonwealth Libraries as part of the OnLine PA project. Please answer the questions below by marking the appropriate selection or filling in answers. Your responses will remain confidential and will not be attributed to you or your library.

To return the questionnaire, please fold and staple it so that the self-addressed and stamped portion on the lower back faces out and return in the mail. Thanks in advance for you help. Your participation is important.

1. Name of person responding_____ Title: _____

   Name of library _____ Internet E-mail address: _____

2. Original interest in participating in **OnLine PA** was motivated primarily by: (check one)

   ( ) Interest on the part of library staff
   ( ) Availability of computing equipment
   ( ) Community interest
   ( ) Board interest
   ( ) Other (please specify): _____

3. Which *one* use below *best* describes the most important benefit resulting from the **OnLine PA** public access Internet workstation? (check one)

   ( ) Expands availability of *reference* resources
   ( ) Expands scope of *overall* collection
   ( ) Attracts new users to the library
   ( ) Can answer *specific* questions
   ( ) Other (please specify):_____

4. How much does the library spend per month for telecommunications charges for the **OnLine PA** public access Internet workstation (note: *only* for the public access Internet workstation funded by the Bell Atlantic grant)?

   $_____ per month

5. Please *estimate* the average numbers of sessions, i.e., a person sits down uses the workstation and leaves the **OnLine PA** public access Internet workstation, during a recent *typical* week (include those who use it more than once):

Estimated Number of Sessions per Week	**Type of User**
_____	Children and students (through age 18)
_____	Adults (older than 18)
_____	Library staff

6. When a first time user wants to use the **OnLine PA** public access Internet workstation and asks for help, how much assistance do you usually provide, on average (in minutes)?

   _____ minutes

7. To date, how often have you provided *formal training sessions* (scheduled and advertised in advance) for users to learn how to use the **OnLine PA** public access Internet workstation or better use the Internet?

   ( ) 0 ( ) 1-5 ( ) 6-10 ( ) 11-15 ( ) 16-20 ( ) 21 or more

8. To date, how many instances of *formal advertising or promotion* (stories in local paper, presentations to local groups, etc.) has your library made regarding the **OnLine PA** public access Internet workstation?

   ( ) 0 ( ) 1-5 ( ) 7-10 ( ) 11-15 ( ) 16-20 ( ) 21 or more

[over]

9. Our library's **OnLine PA** Internet connection has been fully operational since:

_____ (mm/yr)

10. Please indicate the degree to which you agree or disagree with each of the following statements:

	Agree				**Disagree**
a. Providing public access to the Internet has greatly increased the visibility of the library.	1	2	3	4	5
b. Library staff have very good knowledge and skills related to using the *computing equipment* provided through the OnLine PA grant.	1	2	3	4	5
c. Library staff have very good knowledge and skills related to using the *Internet*.	1	2	3	4	5
d. Overall, we are very impressed with the range, extent, and scope of reference material available on the Internet	1	2	3	4	5
e. We have had considerable difficulties with users accessing and reading pornography via the public access Internet workstation.	1	2	3	4	5
f. Generally, the comments from the users of the public access Internet workstation are very positive.	1	2	3	4	5
g. We have had very few technical difficulties with the equipment provided by the grant.	1	2	3	4	5

11. An anecdote that you can relate that best summarizes the usefulness and impact of the **OnLine PA** public access Internet workstation is:

_____

_____

12. What is the one suggestion you would offer to improve the **OnLine PA** project?

_____

_____

13. Given what you know *now* about the **OnLine PA** workstations and the usefulness of public access to the Internet, would you be willing to have paid the full amount of the grant in order to have that access (assuming the grants had not been available).

( ) Yes ( ) Yes, but unable to afford without the Bell Atlantic grant ( ) No ( ) Not sure

_____

FIRST CLASS MAIL

TO: Dr. John Bertot
Department of Information Systems
University of Maryland Baltimore County
1000 Hilltop Circle
Baltimore, Maryland 21250

APPENDIX C

User Survey (May 1997)

ONLINE PA USER SURVEY INSTRUCTIONS

Thank you for assisting us in the Office of Commonwealth Libraries-sponsored OnLine PA project evaluation. Through this survey, we hope to get user feedback concerning (1) their general familiarity with the Internet, (2) the utility of selected Internet-based resources, and (3) their impressions of the Internet in general and OnLine PA project in particular. Your help in administering this survey will be critical to our ability to get this much needed data.

Survey Distribution

Enclosed in this packet you will find 30 copies of the user survey. We are asking that you and/or a library volunteer administer this survey between May 19, 1997 and May 25, 1997. We expect you to obtain 25 ***completed*** surveys during that week. If your library is not able to get 25 ***completed*** surveys, send however many completed surveys your library has by the end of the week to John Bertot at the adress below.

Survey Completion

To administer the survey, please:

- Ask users **AS THEY SIT AT THE ONLINE PA TERMINALS** if they would be willing to participate in the study (our experience demonstrates that putting the surveys in a box next to the terminal will not result in a high survey completion rate);
- Explain the purpose of the survey and the need for user-based assessment of the OnLine PA project;
- Assure them of the confidentiality of their responses;
- Ask willing participants to
  - complete Part I of the survey *prior* to accessing the Internet,
  - complete Part II *while connected* to the Internet, and
  - complete Part III *after* their Internet session;
- Put the date and time on the completed survey.

At the ***end of the week***, or when you have ***25 completed surveys***, send the surveys to:

Dr. John Bertot
Department of Information Systems
University of Maryland Baltimore County
1000 Hilltop Circle
Baltimore, Maryland 21250
(410) 455-3883 phone; (410) 455-1073 fax; <bertot@umbc.edu> email

This is a very important survey -- your assistance is essential. Thank you for all your help!

ONLINE PA USER SURVEY

Instructions: We are conducting this survey to learn more about your use of the Internet and improve services. Please complete Part I of this survey prior to using the Internet connection. Complete Part II as you use the Internet, simply by logging the various sites and sources you visit while on-line. Complete Part III after you have completed your use of the Internet. Please return the questionnaire to the librarian or volunteer when you are done. THANKS.

PART I: Background Information (complete prior to using the Internet)

1. Age: _____ 2. Gender: ( ) male ( ) female

3. Zip code for primary place of residence: _____

4. Your highest level of education completed is (please check one):

( ) elementary ( ) high school ( ) community college ( ) college ( ) graduate school

5. Are you a new user for this library because of the Internet connection? ( ) yes ( ) no

6. Please estimate the number of months of experience you have using the Internet:

_____ months

7. How many times over the last month have you used this library's Internet connection?

_____ times

8. In terms of your Internet skills, do you consider yourself to be (please check one):

( ) a beginner ( ) an intermediate user ( ) an expert user

9. In terms of formal training for Internet use, you have had (please check one):

( ) no training ( ) 1-3 hours of training ( ) more than 3 hours of training

10. Do you have access to the Internet at (please check all that apply):

( ) home ( ) school ( ) work ( ) other ( ) none of these

11. Your primary purpose of using the Internet today is (please check one):

( ) browsing ( ) homework ( ) recreation ( ) work-related ( ) other

12. What type of information are you looking for during this session?

_____

13. If you are willing to participate in a discussion group about your experiences in using the library's Internet connection, which would meet locally for about an hour at a later date, please provide us with your name and phone number:

_____

[over]

PART II: Activities Log while on the Internet (5 most useful sites only)
Note: complete **while** you are on the Internet

Name or URL of Internet Site	Why was this site useful? (please check all that apply)	Number of Minutes at this site?
1.	( ) content ( ) links to other sources ( ) other (please describe)	min.
2.	( ) content ( ) links to other sources ( ) other (please describe)	min.
3.	( ) content ( ) links to other sources ( ) other (please describe)	min.
4.	( ) content ( ) links to other sources ( ) other (please describe)	min.
5.	( ) content ( ) links to other sources ( ) other (please describe)	min.

Part III: Your Assessment of Using the Internet (complete **after** Internet Use).
Please circle one number for each question.

	Very Much So				Not at All
14. While on the Internet, I found the information that I came to the library to obtain.	1	2	3	4	5
15. While on the Internet, I found information that was very useful and interesting.	1	2	3	4	5
16. The Internet information I located will assist me greatly.	1	2	3	4	5
17. The Internet access provided by the library is relatively easy to use.	1	2	3	4	5
18. Having access to the Internet via the library is very important to me.	1	2	3	4	5
19. The computer and telecommunications equipment all worked very well.	1	2	3	4	5
20. I found the speed of the Internet, e.g., loading graphics and downloading information, to be quite good.	1	2	3	4	5
21. I would tell other members of the community about the library's Internet connection.	1	2	3	4	5
22. I was able to use the Internet without library staff or other assistance.	1	2	3	4	5

23. The one thing this library could do to improve my use of the Internet would be: (please describe below)

24. Please tell us how you found out about the library's Internet connection:

Impacts of Public Library Internet Connectivity on Users: Methodology

One component of the overall data collection process will be to obtain (1) an estimate of the number and types of users accessing the Internet via the OnLine PA terminals in the participating libraries, (2) a description of that use, i.e., the types of resources and services users contacted, (3) an assessment of the usefulness of those resources and services contacted, and (4) an assessment of the usefulness of the OnLine PA project as a means of access to the Internet.

Background

During a sample one week period in May, *all* participating libraries were asked to assist the investigators to collect data regarding the public's use of the Internet. Prior to that sample week period, a packet of information that included instructions and data collection forms were distributed to participating libraries at the OnLine PA spring training sessions. Participants were also informed of the purpose, intent, and importance of the user survey to the OnLine PA assessment project during these training sessions.

Data Collection Instrument

The study team developed the two-page survey as a means for OnLine PA terminal users to provide data concerning (1) their general familiarity with the Internet, (2) the utility of selected Internet-based resources, and (3) their impressions of the Internet in general and OnLine PA project in particular.

The initial survey was reviewed by selected OnLine PA project staff. Based on comments from that review, the study team revised the survey. The revised survey was then pre-tested by two MLS students at the School of Information Studies, Syracuse University. Comments and feedback from this pre-test were then incorporated into the final survey.

Survey Distribution Technique

During the one-week sample period in May, all participating libraries asked up to 25 users of their OnLine PA terminal to complete a survey. A librarian or volunteer gave the users the survey, explained to them the purpose for collecting the data, and instructed the users in the completion of the survey.

The librarian or volunteer instructed the users to complete Part I of the survey *prior* to accessing the Internet, complete Part II *while connected* to the Internet, and complete Part III *after* their Internet session. At the end of the sample week or having completed 25 surveys (which ever came first), all completed questionnaires were returned to the investigators for analysis.

APPENDIX D

Fall Training Evaluation Survey (October 1996)

OnLine at PA Libraries Initial Training Evaluation Survey

Please take a few minutes of your time to complete this questionnaire. We are interested in the degree to which the training you just received met your needs for being able to use the Internet when you go back to your library. Thanks very much for taking the time to fill-out this survey.

1. Participating Library: _____

2. Population of legal service area served by your library: _____

3. Are you a: ☐ Professional librarian (e.g., ALA/MLS)? ☐ Other? (Please describe):

   _____

4. How many years have you been a public librarian? _____ Years (Rounded to nearest whole year)

5. Overall, how would you rate your Internet navigation skills? (Check [X] one only)

   ☐ Below Average ☐ Average ☐ Above Average ☐ Excellent

6. Overall, how would you rate your personal computer use skills? (Check [X] one only)

   ☐ Below Average ☐ Average ☐ Above Average ☐ Excellent

---

7. The three (3) most important goals I had for this training were:

   a. _____

   b. _____

   c. _____

   ☐ Didn't have any goals/expectations

8. Please assess the initial OnLine at PA Libraries training session along the following (**PLEASE CIRCLE ONE NUMBER FOR EACH ITEM**):

	Not At All				Very Much So	Don't Know
a) My goals for this training session were met	1	2	3	4	5	☐
b) The ideas presented in this training session were very clear	1	2	3	4	5	☐
c) There was sufficient opportunity to ask questions during the training session	1	2	3	4	5	☐
d) Overall, the trainer(s) was well prepared	1	2	3	4	5	☐
e) There was too much material covered in this training session	1	2	3	4	5	☐
f) I feel like I now have a good basic understanding of how to works	1	2	3	4	5	☐
g) Please estimate the degree of difficulty you will have in configuring the hardware/software for this project when you return to your library	1	2	3	4	5	☐

9. Please identify the extent to which you agree with the following (**PLEASE CIRCLE ONE NUMBER FOR EACH ITEM**):

	Strongly Disagree				Strongly Agree	Don't Know
a) There is a great deal of interest in this project at my library	1	2	3	4	5	☐
b) Internet-accessible resources can be useful in a rural library context	1	2	3	4	5	☐

(over)

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10. At the beginning of the day, the degree to which I understood the following was (**PLEASE CIRCLE ONE NUMBER FOR EACH ITEM**):

	Not At All				A Great Deal
URL Addressing	1	2	3	4	5
Netscape Navigation	1	2	3	4	5
Dialing Internet Service Provider	1	2	3	4	5
Setting Up PC/Printer	1	2	3	4	5
Printing Documents	1	2	3	4	5

11. At the end of the day, the degree to which I understand the following is (**PLEASE CIRCLE ONE NUMBER FOR EACH ITEM**):

	Not At All				A Great Deal
URL Addressing	1	2	3	4	5
Netscape Navigation	1	2	3	4	5
Dialing Internet Service Provider	1	2	3	4	5
Setting Up PC/Printer	1	2	3	4	5
Printing Documents	1	2	3	4	5

12. The degree to which I can now go back to my library and **USE** the following is (**PLEASE CIRCLE ONE NUMBER FOR EACH ITEM**):

	Not At All				A Great Deal
URL Addressing	1	2	3	4	5
Netscape Navigation	1	2	3	4	5
Dialing Internet Service Provider	1	2	3	4	5
Setting Up PC/Printer	1	2	3	4	5
Printing Documents	1	2	3	4	5

13. In the space below, please share any ideas you might have as to how future PA Access training sessions can be enhanced to better meet your/your library's needs:

THANK YOU FOR YOUR PARTICIPATION!

Questions on completing this survey? Contact:
John Bertot
Department of Information Systems
Un. of Maryland Baltimore County
1000 Hilltop Circle
Baltimore, MD 21250
(410) 455-3883 phone
(410) 455-1073 fax
<bertot@umbc.edu>e-mail

APPENDIX E

Spring Training Evaluation Survey (April 1997)

OnLine at PA Libraries 1997 Spring Training Evaluation Survey

Please take a few minutes of your time to complete this questionnaire. We are interested in the degree to which the training you just received met your needs for being able to use the Internet to answer reference questions. Thanks very much for taking the time to complete this survey.

1. Participating Library: _____

2. Are you a: ❑ Professional librarian (e.g., ALA/MLS)? ❑ Other? (Please describe): _____

3. Overall, how would you rate your Internet navigation skills? (Check [X] one only)

❑ Below Average ❑ Average ❑ Above Average ❑ Excellent

4. Please assess this OnLine at PA Libraries training session along the following (**PLEASE CIRCLE ONE NUMBER FOR EACH ITEM**):

	Strongly Agree				Strongly Disagree	Don't Know
a) My goals for this training session were met	1	2	3	4	5	❑
b) The ideas presented in this training session were very clear	1	2	3	4	5	❑
c) There was sufficient opportunity to ask questions during the training session	1	2	3	4	5	❑
d) Overall, the trainer(s) was well prepared	1	2	3	4	5	❑
e) There was too much material covered in this training session	1	2	3	4	5	❑
f) I feel like I now have a good basic understanding of how to use the Internet as a reference tool	1	2	3	4	5	❑
g) I will now be able to use the Internet to answer reference questions	1	2	3	4	5	❑
h) The Internet will be a welcome addition to our library's reference tools	1	2	3	4	5	❑

5. The degree to which I understood the following was (**PLEASE CIRCLE ONE NUMBER FOR EACH ITEM**):

	At the Beginning of the Day					At the End of the Day				
	Not At All				A Great Deal	Not At All				A Great Deal
a) Searching the Web	1	2	3	4	5	1	2	3	4	5
b) Using Web-based search engines	1	2	3	4	5	1	2	3	4	5
c) Accessing government documents on the Web	1	2	3	4	5	1	2	3	4	5
d) Identifying/using reference resources on the Web	1	2	3	4	5	1	2	3	4	5
e) Creating and organizing bookmarks	1	2	3	4	5	1	2	3	4	5
f) Downloading Web files to a diskette	1	2	3	4	5	1	2	3	4	5
g) Downloading software from the Web	1	2	3	4	5	1	2	3	4	5
h) Using Fortress	1	2	3	4	5	1	2	3	4	5

[over]

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6. Now that I have had this training, I will go back to my library and begin offering Internet training to **(PLEASE CHECK [X] ALL THAT APPLY)**:

❑ Other library staff ❑ The public ❑ Local government officials

❑ Will not offer additional training ❑ Other (please describe): _____

7. Overall, I consider the success of the OnLine PA project to date to be **(PLEASE CIRCLE ONE NUMBER)**:

Very Successful				Very Unsuccessful
1	2	3	4	5

THANK YOU FOR YOUR PARTICIPATION!

Questions on completing this survey? Contact:
John Bertot
Department of Information Systems
Un. of Maryland Baltimore County
1000 Hilltop Circle
Baltimore, MD 21250
(410) 455-3883 phone
(410) 455-1073 fax
<bertot@umbc.edu> e-mail

APPENDIX F

Help Desk Log

HELP DESK LOG

Date: / /	Time:	AP Lib. Code:
Library:		
Caller:		Caller's Title:
Phone: ( )		Fax: ( )
IU 29 Technical Support Specialist:		

Equipment List —
Brand/Model of Computer #1:
Brand/Model of Computer #2:
Brand/Model/Number of CD-DRIVES:
☐ Stand-alone ☐ LAN-Workstation ☐ Optical Server ☐ Non-Optical Server
☐ Standard LANtastic ☐ Novell Netware ver. _____ ☐ Other: _____
☐ PC/MS DOS 3.3 ☐ PC/MS DOS 5.xx ☐ PC/MS DOS 6.xx ☐ Other: _____

Problem Description —

First Contact/Comments —

Problem resolved on ____/____/____ ; ____:____ .M.

Problem resolved by: _____

F-1

Follow-up Call #1 - Date: / / ; Time: —

Follow-up Call #2 - Date: / / ; Time: —

Follow-up Call #3 - Date: / / ; Time: —

APPENDIX G

Instructions to Site Libraries

APPENDIX G

May 20, 1997

Ms. _____
Participating Library
Address
City, PA ZIP

Dear:

Thank you for agreeing to participate in our site visits for the OnLine PA project evaluation. I enjoyed speaking with you last week about our forthcoming visit to _____ on June 5, 1997. The purpose of this letter is to describe the nature of the visit in a bit more detail, provide additional information that may help you to organize the visit, and to ask for some logistical information to help us get there.

As I indicated on the phone, there are four main parts to the site visit. Let me briefly describe each one so that you will know what to expect.

1: Meeting with the Director

We would like to spend the first session with you, say from 9:00 AM- 10:15 AM. The objectives of this session are to obtain an administrative overview of your library's role in the project; review costs, benefits, and issues related to your involvement; identify specific impacts from involvement on the library, library staff, and the local community from involvement; and discuss the library's next steps in both the project and in providing public access to the Internet.

We are especially interested in your views on the costs and benefits from participating in the project. Would you do it again if asked? Has participation really affected the community and how? Has the OnLine PA connection increased visibility and use of the library? Will you leverage this initial Internet connection and Internet services and expand them in the future?

2: Meeting with Library Staff

This meeting typically would go from 10:30 until 11:45 AM. Please invite ALL library staff (and volunteers if appropriate) who have been involved in the OnLine PA project at the library. By involved, we mean anyone that has received training, anyone who has provided instruction or training to users; or anyone who has operated or used the OnLine PA connection. During this session, the topics we would like to discuss are:

- How would you describe the users and types of uses being made of the public access Internet connection?

- What kind of training does the library provide to users?
- To what degree do you (library staff) use the OnLine PA connection and for what do you use it?
- Please describe some of the most important "successes" and "failures" you have seen in using the OnLine PA connection?
- What are the most important benefits and impacts that have resulted to you, the library, and the community from having the OnLine PA connection?

The meeting should be held in a meeting room or at a conference area in the library where we will not disturb anyone else. If we need to meet with them individually in orcer to operate services points during this time, such is fine. We hope that you will also attend this meeting but will encourage others to talk and offer *their* views since we will have already met with you!

3: Meeting with Local Librarians

Please invite up to 7 librarians in neighboring communities to meet with us for lunch and discussion. The librarians should also be participants in the OnLine PA project. The librarians can be directors or staff -- as long as they have some experience with OnLine PA and provision of the Internet services in their library.

If appropriate please make reservations for all of us -- John and I plus however many agree to participate. We should probably all meet directly at the designated restaurant rather than at the library to save on time. The closer, quicker, and easier the restaurant is to get into and out of, the better! Tell everyone that the lunch is on us. We would expect to have lunch and return to the library by 1:45.

The same general topics that we listed for discussion with the staff will also be the topics that we will raise during lunch. So if they want to know the topics in advance, please feel free to provide them with the topics listed in item 2 above. It may be useful to remind them about the meeting and its location a couple of days prior to the time.

4: Meeting with Local Users

This meeting is *very important* as a prime objective of the evaluation is to talk to users of the OnLine PA public access connections. If we schedule the meeting for 2:00 we should finish by 3:30 PM. Again, the meeting should be held in a meeting room or at a conference area in the library where we will not disturb anyone else. We will ask that the library director introduce the meeting and then leave.

We would suggest that you start NOW to arrange for users to attend this focus group session. We hope that you will be able to identify regular users of the OnLine PA Internet connection, that they are knowledgeable about the use of the connection, and willing to share their experiences with us. It is fine if they use the Internet from their home *as long as they are users of the connection at the library too!* Users can be

young or old, students, whatever -- as long as they have used the library's OnLine PA connection and are willing to discuss their experiences. In fact, users of the Online PA project, but from other libraries in the area, are also welcome to participate in the session if possible.

There are a number of strategies to use in organizing this session. One is to have an announcement of the meeting, at the computer, asking users to participate in a discussion about their use of the On-line PA Internet connection. Indicate that those interested should come to the reference desk to sign-up. Then get their name and phone number as confirmation. You should probably get about 15 users to agree to attend in advance as that usually results in about 9 that actually come.

In conjunction with the above approach it is usually better to personalize the invitation by going to those using the Internet connection (especially users that you or the staff know) and asking them directly to participate. Then get their name and phone number as confirmation. Two-three days before the meeting, please give them all a reminder call letting them know we are looking forward to seeing them at the discussion session. Bribe them with the high quality cookies we will bring!

Please stress to these users the importance of their participation as it is essential to document their views on the use and impact of providing this new Internet service. Indicate that information from the study will help the library plan for future Internet services and possibly help the library and the state obtain additional funding to support such services. Typical topics we will discuss with the users are:

- How did they learn of the OnLine PA Internet connection?
- How often do they use the connection and what types of information resources and services do they use?
- Do they use it for professional, personal, or recreational reasons -- can they provide examples of specific uses and how those sources helped (or did not help) them?
- What have been the impacts and benefits of using the library's OnLine PA connection?
- Did they encounter any difficulties in using the workstation or the software?
- How might the OnLine PA Internet connection and services be improved?
- How have they learned to use the OnLine PA Internet connection?
- What do you recommend the library do to continue to improve this service?
- Do you think the local community would be willing to support the public access Internet connectivity *directly*?

This is a general flavor of the types of topics we will explore with them -- others may come up depending on their knowledge and interest. At 3:30 PM we will end the meeting and thank them very much!

In Preparation

Prior to our coming to the library I would greatly appreciate it if you would send me information on the following:

- Although we have some basic statistical information about your library, we would appreciate it very much if you would send me a "care package" of any information about the library that you think would be useful for us to know. This could include a budget (especially any cost items specifically related to the project), brochures related to the OnLine PA project, promotional information or news clippings about the project, user logs or sign-up sheets, etc.

- Map with directions on how to find your library and where to park if it is not obvious.

- Your recommendation for a hotel/motel (with phone number) where we might stay for the night.

Please fax me information on hotels/motels and a map at (fax no.). Please send the care package to me at (address).

* * * *

I think the above about covers the information we need to provide you. If you have any questions you can call me at my office (phone no.) where I also have voice mail or fax me (phone no.). We *really* appreciate your help with participating in the site visit. THANKS, and we are looking forward to meeting you at 9:00 AM on June Xth.

Sincerely,

Chuck McClure

cc: John Bertot
Barbara Cole
Jim Fogarty

APPENDIX H

Participant Questionnaire

OnLine PA Evaluation Focus Group/Interview Participant Questionnaire

Thank you for participating in the On-line PA evaluation. Please take the time to complete this supplemental questionnaire before you leave today. The information you provide will not in any way be associated with you.

1. Name: _____

2. Institution: _____

3. Phone/fax number with area code: (___) _____ p / (___) _____ f

4. Internet e-mail address: _____

5. Current position/years in position: _____ /___ years

6. When did your OnLine PA computer **first** become available to the public (e.g., up and running with Internet access)?

   (mm/yr) _____

   ➡ Approximately how many hours per week is the OnLine PA computer available for public use?

   _____ hours/week

   ➡ Please estimate the number of people using the OnLine PA computer for Internet access per week:

   _____ people/week

7. Was the OnLine PA computer the first multimedia computer in your library available for public use?

   _____ Yes _____ No

8. Overall, how would you rate your Internet navigation skills?

   ___ Poor ___ Below Average ___ Average ___ Above Average ___ Excellent

9. Please list the two most significant benefits of the OnLine PA initiative to your community:

   (1) _____

   (2) _____

10. Please identify the two most significant factors that affect your library's ability to support the OnLine PA initiative:

    (1) _____

    (2) _____

APPENDIX I

User Questionnaire

OnLine PA Evaluation User Focus Group/Interview Participant Questionnaire

Thank you for participating in the OnLine PA evaluation. Please take the time to complete this supplemental questionnaire before you leave today. The information you provide will not in any way be associated with you.

1. Age: _____ 2. Gender: ( ) male ( ) female

3. Current Occupation: _____

4. Your highest level of education completed is (please check one):

( ) elementary ( ) high school ( ) community college ( ) college ( ) graduate school

5. Are you a new user for this library because of the Internet connection? ( ) yes ( ) no

6. Did you first access the Internet through the library's OnLine PA Internet connection?

❑ Yes ❑ No

7. How many times over the last month have you used this library's Internet connection?

_____ times

8. In terms of your Internet skills, do you consider yourself to be (please check one):

( ) a beginner ( ) an intermediate user ( ) an expert user

9. In terms of formal training for Internet use, you have had (please check one):

( ) no training ( ) 1-3 hours of training ( ) more than 3 hours of training

10. Do you have access to the Internet at (please check all that apply):

( ) home ( ) school ( ) work ( ) other ( ) none of these

11. I primarily use the library's OnLine PA Internet connection for (please check one):

( ) browsing ( ) homework ( ) recreation ( ) work-related ( ) other

12. The two most significant benefits of the OnLine PA initiative are:

(1) _____

(2) _____

13. The two most significant improvements to the library's OnLine PA Internet connection that I would like to see are:

(1) _____

(2) _____